# SECTION 2, TOWNSHIP 27 NORTH, RANGE 6 EAST, W.M.

#### **PROJECT INFORMATION**

TAX PARCEL NUMBERS 005173-002-004-00, 270602-004-081-00 78,934 SF (1.81 AC)

SITE ADDRESS 17510 WEST MAIN STREET

MONROE, WA 98272

LOCAL SERVICES

CITY OF MONROE CITY OF MONROE SEWAGE DISPOSAL: WATER DISTRICT: SCHOOL DISTRICT: MONROE SCHOOL DISTRICT FIRE DISTRICT: FIRE DISTRICT #7 POST OFFICE: CITY OF MONROE ELECTRIC: PHONE: SNOHOMISH COUNTY PUD SNOHOMISH COUNTY PUD CABLE: COMCAST

### CONTACT PERSON /

**APPLICANT** VINH QUANG VUONG 5936 NE 3RD CT. **RENTON, WA 98059** (206) 390-5272 Tphomellc@yahoo.com

#### ARCHITECT

AMBI DESIGN + BUILD MILTON LAM (206) 303-7877 milton@mlarc.com

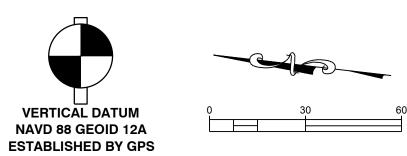
## ENGINEER/SURVEYOR

NOTES

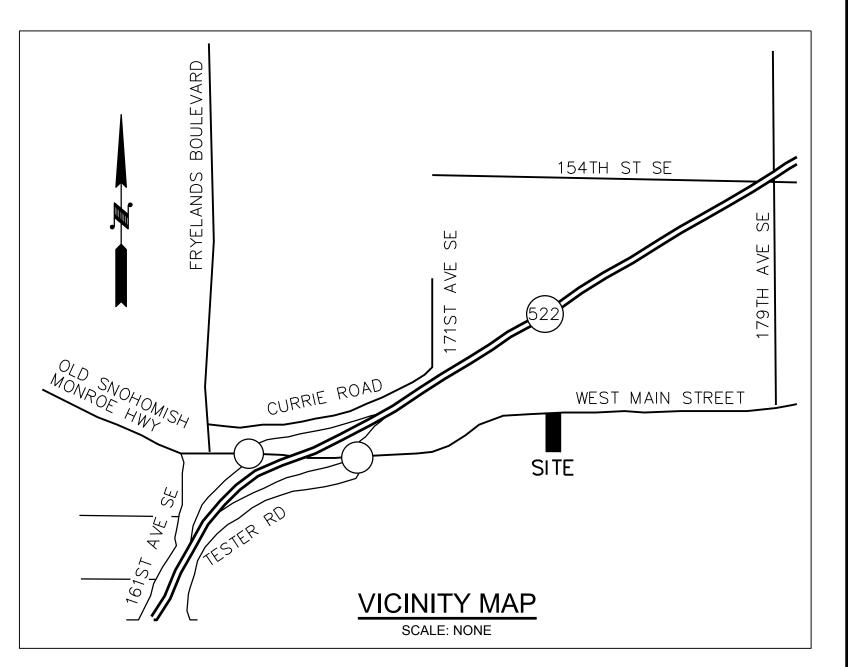
SEE ARCHITECTURAL SITE PLAN BY
MILTON LAM OF AMBI DESIGN + BUILD

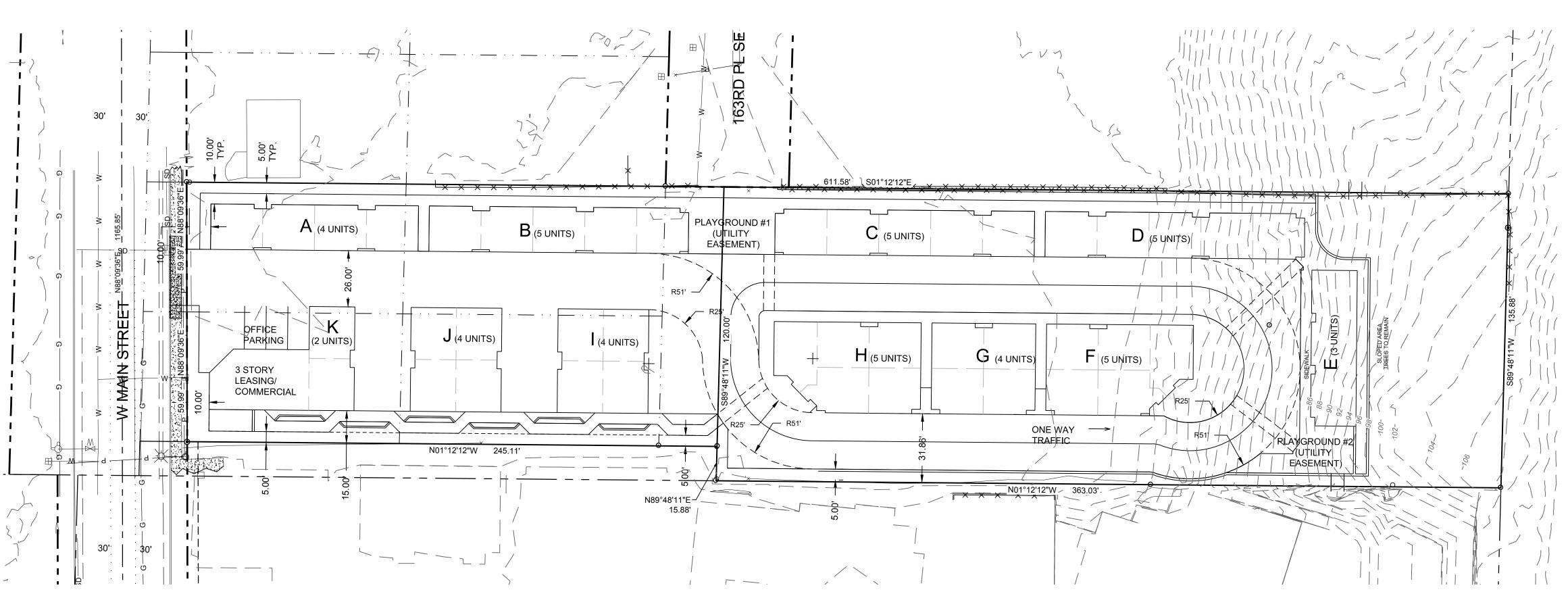
HARMSEN AND ASSOCIATES, INC DAVID HARMSEN, PE 125 EAST MAIN STREET, SUITE 104 Arlington, WA 98223 (360) 794-7811 davidh@harmseninc.com

#### **CERTIFIED EROSION** CONTROL SPECIALIST



SHEET INDEX			
Sheet Number	Sheet Title		
C1.0	COVER SHEET & SITE LAYOUT PLAN		
C2.0	SURFACE WATER POLLUTION PREVENTION		
C3.0	WATER & SEWER PLAN		
C3.1	SEWER FORCEMAIN PLAN		
C3.2	WATER DETAILS		
C3.3	WATER NOTES		
C4.0	STORMWATER PLAN		
C4.1	STORMWATER PROFILE		
C4.2	CONTECH STORM FILTER STANDARD DETAILS		
C5.0	GRADING & PAVING PLAN		
C5.1	GRADING CROSS SECTIONS		
C5.2	ON-SITE PAVING SECTIONS		





#### LEGAL DESCRIPTION

(PER RECORD OF SURVEY RECORDED ON AUDITOR'S FILE NO. 200105095002, RECORDS OF SNOHOMISH COUNTY, WASHINGTON.)

LOTS 4, 5, 6 AND 7 BLOCK 2, PLAT OF MONROE, SNOHOMISH COUNTY, WASHINGTON ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 2 OF PLATS, PAGE 84, RECORDS OF SNOHOMISH COUNTY, WASHINGTON.

TOGETHER WITH THAT PORTION OF VACATED MAPLE STREET, AS VACATED IN VOLUME 37 OF COMMISSIONER'S RECORDS ON PAGE 433, WHICH UNDER VACATION, ATTACHED TO SAID PROPERTY BY OPERATION OF LAW. SITUATE IN COUNTY OF SNOHOMISH, STATE OF WASHINGTON.

THAT PORTION OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 2, TOWNSHIP 27 NORTH, RANGE 6 EAST, W.M. DESCRIBED AS

BEGINNING AT A POINT ON THE SOUTH BOUNDARY LINE OF MAPLE STREET 27 FEET SOUTH OF THE SOUTHEAST CORNER OF LOT 4, BLOCK 2, PLAT OF MONROE IN SAID SECTION 2;

THENCE SOUTH PARALLEL WITH THE SUBDIVISION LINE BETWEEN THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER AND THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 2 TO THE SECTION LINE BETWEEN SAID SECTION 2 AND SECTION 11, OF SAID TOWNSHIP AND

THENCE WEST ALONG SAID SUBDIVISION LINE TO THE 1/16TH CORNER BETWEEN THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER AND THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 2; THENCE NORTH ON THE SUBDIVISION LINE BETWEEN THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER AND THE SOUTHWEST QUARTER OF THE THE SOUTHEAST QUARTER OF SAID SECTION 2 TO THE SOUTH BOUNDARY OF MAPLE STREET;

THENCE EASTERLY ALONG THE SOUTH BOUNDARY OF MAPLE STREET TO THE POINT OF BEGINNING. SITUATE IN THE CITY OF MONROE, COUNTY OF SNOHOMISH, STATE OF

TOGETHER WITH A NON-EXCLUSIVE EASEMENT FOR INGRESS, EGRESS, AND

UTILITIES OVER, UNDER, THROUGH AND ACROSS THE FOLLOWING DESCRIBED

THAT PORTION OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 2, TOWNSHIP 27 NORTH, RANGE 6 EAST, W.M. DESCRIBED AS

BEGINNING AT A POINT ON THE SOUTH BOUNDARY LINE OF MAPLE STREET 27 FEET SOUTH OF THE SOUTHEAST CORNER OF LOT 4, BLOCK 2, PLAT OF MONROE IN SAID SECTION 2; THENCE WESTERLY 60 FEET ALONG THE SOUTH BOUNDARY LINE OF VACATED

THENCE NORTHEASTERLY TO A POINT WHICH LIES 5 FEET SOUTH OF THE SOUTHEAST CORNER OF SAID LOT 4, BLOCK 2, PLAT OF MONROE; THENCE SOUTH TO THE POINT OF BEGINNING.

SITUATE IN THE CITY OF MONROE, COUNTY OF SNOHOMISH, STATE OF WASHINGTON.

> RECEIVED 06/27/2018 CITY OF MONROE

**REVISIONS** 

ШО ENGINER



DRAWN BY: **CHECKED BY:** 9/7/2017 JOB #: SCALE:



# TEMPORARY EROSION & SEDIMENTATION CONTROL NOTES:

1. ALL TEMPORARY EROSION AND SEDIMENT CONTROL (TESC) MEASURES SHALL BE INSTALLED BY THE CONTRACTOR PRIOR TO ANY GRADING OR LAND CLEARING IN ACCORDANCE WITH THE APPROVED TESC PLAN. THESE FACILITIES MUST BE MAINTAINED DAILY UNTIL FINAL APPROVAL BY THE CITY INSPECTOR.

2. THE TESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE TESC FACILITIES SHALL BE UPGRADED (E.G. ADDITIONAL SUMPS, RELOCATION OF DITCHES AND SILT FENCES, ETC.) AS NEEDED FOR UNEXPECTED STORM EVENTS.

3. CONSTRUCTION ACCESS TO THE SITE SHALL BE ONLY AS SHOWN ON THE APPROVED PLANS. ALL VEHICLES LEAVING THE SITE ONTO PUBLIC RIGHT-OF-WAY SHALL BE CLEANED TO PREVENT TRACKING OF MUD, DIRT, AND OTHER DEBRIS.

4. THE CONTRACTOR SHALL SWEEP AND/OR WASH ACCESS STREETS AT LEAST DAILY OR MORE FREQUENTLY AS MAY BE NECESSARY AND SO DIRECTED BY THE CITY OF MONROE. DUST CONTROL ON SITE WILL BE REQUIRED.

5. INSTALL INLET PROTECTION AT DOWNSTREAM CATCH BASIN GRATES AND AT CATCHBASINS INSTALLED ON-SITE PER DETAIL 1/C1.0.

6. POLLUTED WATER MAY NOT BE PUMPED INTO THE CITY STORM SYSTEM.
7. ALL DISTURBED AREAS SUCH AS RETENTION FACILITIES, ROADWAY
BACK-SLOPES, ETC. SHALL BE SEEDED WITH A PERENNIAL GROUND COVER
TO MINIMIZE EROSION. GRASS SEEDING WILL BE DONE USING AN
APPROVED HYDROSEEDER.

8. IMMEDIATELY FOLLOWING FINISH GRADING, PERMANENT VEGETATION CONSISTING OF RAPID, PERSISTENT AND LEGUME WILL BE APPLIED AT A MINIMUM #80 PER ACRE. THIS IS TO INCLUDE THE FOLLOWING: 20% ANNUAL, PERENNIAL OR HYDROSEED REQUIRED. PREPARATION OF SUBGRADE MAY BE REQUIRED PRIOR TO HYDROSEEDING.

9. ALL EROSION CONTROL ON SITE MUST COMPLY WITH THE DEPARTMENT

OF ECOLOGY STORMWATER MANUAL FOR WESTERN WASHINGTON, 2005 EDITION.

10. EROSION AND SEDIMENTATION CONTROL DEVICES SHALL BE INSPECTED AT REGULAR INTERVALS FOR DAMAGE AND SEDIMENT ACCUMULATION. AT A MINIMUM, THE FACILITIES SHALL BE INSPECTED WEEKLY AND IMMEDIATELY AFTER ANY RUNOFF PRODUCING RAIN EVENT. INSPECTIONS SHALL TAKE PLACE AT THE END OF EACH WORK WEEK AND ANY NEEDED REPAIRS OR MAINTENANCE SHALL BE COMPLETED BEFORE THE JOB IS SHUT DOWN FOR THE WEEKEND. INSPECTIONS SHALL CONTINUE AT THESE INTERVALS DURING PERIODS OF WORK STOPAGES OR UNTIL PERMANENT VEGETATION IS ESTABLISHED.

11. CONTRACTOR SHALL REMOVE EROSION AND SEDIMENTATION CONTROL DEVICES WHEN CONSTRUCTION IS COMPLETE.

12. FROM OCTOBER 1 TO APRIL 30, EXPOSED SOILS TO BE LEFT UNWORKED FOR MORE THAN 2 DAYS SHALL BE STABILIZED. OTHERWISE SOILS TO BE

LEFT UNWORKED FOR 7 DAYS SHALL BE STABILIZED.

## POLLUTANTS OTHER THAN SEDIMENT

ALL POLLUTANTS, INCLUDING WASTE MATERIALS AND DEMOLITION DEBRIS, THAT OCCUR ONSITE SHALL BE HANDLED AND DISPOSED OF IN A MANNER THAT DOES NOT CAUSE CONTAMINATION OF STORMWATER. GOOD HOUSEKEEPING AND PREVENTATIVE MEASURES WILL BE TAKEN TO ENSURE THAT THE SITE WILL BE KEPT CLEAN, WELL ORGANIZED, AND FREE OF DEBRIS. IF REQUIRED, BMPS TO BE IMPLEMENTED TO CONTROL SPECIFIC SOURCES OF POLLUTANTS ARE DISCUSSED BELOW.

VEHICLES, CONSTRUCTION EQUIPMENT, AND/OR PETROLEUM PRODUCT STORAGE/DISPENSING:

• ALL VEHICLES, EQUIPMENT, AND PETROLEUM PRODUCT STORAGE/DISPENSING AREAS WILL BE INSPECTED REGULARLY TO DETECT ANY LEAKS OR SPILLS, AND TO IDENTIFY

MAINTENANCE NEEDS TO PREVENT LEAKS OR SPILLS.

ON-SITE FUELING TANKS AND PETROLEUM PRODUCT STORAGE CONTAINERS SHALL

INCLUDE SECONDARY CONTAINMENT.

SPILL PREVENTION MEASURES, SUCH AS DRIP PANS, WILL BE USED WHEN CONDUCTING MAINTENANCE AND REPAIR OF VEHICLES OR EQUIPMENT.

IN ORDER TO PERFORM EMERGENCY REPAIRS ON SITE, TEMPORARY PLASTIC PLACED BENEATH AND, IF RAINING, OVER THE VEHICLE.

 CONTAMINATED SURFACES SHALL BE CLEANED IMMEDIATELY FOLLOWING ANY DISCHARGE OR SPILL INCIDENT.

CHEMICAL STORAGE:

• ANY CHEMICALS STORED IN THE CONSTRUCTION AREAS WILL CONFORM TO THE APPROPRIATE SOURCE CONTROL BMPS LISTED IN VOLUME IV OF THE ECOLOGY STORMWATER MANUAL. IN WESTERN WA, ALL CHEMICALS SHALL HAVE COVER, CONTAINMENT, AND PROTECTION PROVIDED ON SITE, PER BMP C153 FOR MATERIAL

DELIVERY, STORAGE AND CONTAINMENT IN SWMMWW 2005
 APPLICATION OF AGRICULTURAL CHEMICALS, INCLUDING FERTILIZERS AND PESTICIDES, SHALL BE CONDUCTED IN A MANNER AND AT APPLICATION RATES THAT WILL NOT RESULT IN LOSS OF CHEMICAL TO STORMWATER RUNOFF. MANUFACTURERS' RECOMMENDATIONS FOR APPLICATION PROCEDURES AND RATES SHALL BE FOLLOWED.

#### DEMOLITION:

DUST RELEASED FROM DEMOLISHED SIDEWALKS SHALL BE CONTROLLED USING DUST CONTROL MEASURES (BMP C140).

• STORM DRAIN INLETS VULNERABLE TO STORMWATER DISCHARGE CARRYING DUST, SOIL, OR DEBRIS WILL BE PROTECTED USING STORM DRAIN INLET PROTECTION (BMP C220 AS INDICATED ON THE PLAN).

PROCESS WATER AND SLURRY RESULTING FROM SAWCUTTING AND SURFACING OPERATIONS WILL BE PREVENTED FROM ENTERING THE WATERS OF THE STATE BY IMPLEMENTING SAWCUTTING AND SURFACING POLLUTION PREVENTION MEASURES (BMP C152).

1. SLURRY AND CUTTING SHALL BE VACUUMED DURING CUTTING AND SURFACING OPERATIONS.

2. SLURRY AND CUTTINGS SHALL NOT DRAIN TO ANY NATURAL OR CONSTRUCTED DRAINAGE CONVEYANCE.

3. COLLECTED SLURRY AND CUTTINGS SHALL BE DISPOSED OF IN A MANNER THAT DOES NOT VIOLATE GROUNDWATER OR SURFACE WATER QUALITY STANDARDS. CONCRETE AND GROUT:

 PROCESS WATER AND SLURRY RESULTING FROM CONCRETE WORK WILL BE PREVENTED FROM ENTERING THE WATERS OF THE STATE BY IMPLEMENTING CONCRETE HANDLING MEASURES (BMP C151).

1. CONCRETE TRUCK CHUTES, PUMPS, AND INTERNALS SHALL BE WASHED OUT ONLY INTO FORMED AREAS AWAITING INSTALLATION OF CONCRETE OR ASPHALT.

UNUSED CONCRETE REMAINING IN THE TRUCK AND PUMP SHALL BE RETURNED TO THE ORIGINATING BATCH PLANT FOR RECYCLING.
 HAND TOOLS INCLUDING, BUT NOT LIMITED TO, SCREEDS, SHOVELS, RAKES,

FLOATS, AND TROWELS SHALL BE WASHED OFF ONLY INTO FORMED AREAS AWAITING INSTALLATION OF CONCRETE OR ASPHALT.

WHEN NO FORMED AREAS ARE AVAILABLE, WASHWATER AND LEFTOVER PRODUCT SHALL BE CONTAINED IN A LINED CONTAINER. CONTAINED CONCRETE SHALL BE DISPOSED OF IN A MANNER THAT DOES NOT VIOLATE GROUNDWATER OR SURFACE WATER QUALITY STANDARDS.

SANITARY WASTEWATER:

 PORTABLE SANITATION FACILITIES WILL BE FIRMLY SECURED, REGULARLY MAINTAINED, AND EMPTIED WHEN NECESSARY.

SOLID WASTE WILL BE STORED IN SECURE, CLEARLY MARKED CONTAINERS.

OTHER BMPS WILL BE ADMINISTERED AS NECESSARY TO ADDRESS ANY ADDITIONAL POLLUTANT SOURCES ON SITE.

#### **EROSION CONTROL BMP'S:**

THE CONSTRUCTION STAGING AREA AND PARKING IS DIAGRAMATIC ONLY. THE CONTRACTOR IS ALLOWED TO LOCATE THESE FACILITIES ON THE SITE AS NEEDS DICTATE IN COORDINATION WITH THE CITY INSPECTOR.

PRESERVE NATURAL VEGETATION (BMP C101)
DO NOT CLEAR PAST THE DESIGNATED CLEARING LIMITS.

HIGH VISIBILITY FENCING (BMP C103)
USE IN COMBINATION WITH BMP C233, SILT FENCE ALONG THE WEST, NORTH AND EAST BOUNDARIES AS INDICATED ON THE PLANS.
CONSTRUCTION ENTRANCE (BMP C105)

INSTALL CONSTRUCTION ENTRANCE AS LOCATED ON THE PLANS PER STD

CONSTRUCTION ROAD/PARKING AREA STABILIZATION (BMP C107)
ONCE GRADING IN FUTURE PAVED AREAS HAS REACHED SUBGRADE, THE GRAVEL BASE COURSE OF MATERIAL INDICATED ON THE APPLICABLE PAVING SECTION IS TO BE PLACED ON THE SUBGRADE TO STABILIZE EXPOSED SURFACES. SURFACES PROTECTED THIS WAY INCLUDE SIDEWALKS, AND THE CONSTRUCTION STAGING AREA AND PARKING.

TEMPORARY & PERMANENT SEEDING (BMP C120)
PERMANENT SEEDING SHALL BE USED TO STABILIZE EXPOSED SOILS AND SHALL BE PERFORMED UNDER THE DIRECTION OF THE LANDSCAPE PLANS AND SPECIFICATIONS

AND SPECIFICATIONS.

MULCHING (BMP C121)

STABILIZE EXPOSED SURFACES WITH 4" STERILE STRAW MULCH WHEN

SURFACES ARE TO BE UNWORKED FOR THE SEASONAL TIME FRAMES LISTED
IN THE TESC NOTES AND SWPPP NARRATIVE. MULCH CAN BE USED TO

TEMPORARILY STABILIZE SOILS LINDER FLITLIBE PAVEMENT. HOWEVER, ALL

SURFACES ARE TO BE UNWORKED FOR THE SEASONAL TIME FRAMES LISTED IN THE TESC NOTES AND SWPPP NARRATIVE. MULCH CAN BE USED TO TEMPORARILY STABILIZE SOILS UNDER FUTURE PAVEMENT, HOWEVER, ALL MULCH MUST BE REMOVED PRIOR TO PLACEMENT OF BASE COURSES. ALTERNATIVELY, CONSTRUCTION ROAD/PARKING STABILIZATION CAN BE USED IN FUTURE PAVED AREAS. PLASTIC COVERING (BMP C123)

USE PLASTIC SHEATHING TO PROTECT STOCKPILES. ANCHOR WITH ROPED TOGETHER SAND BAGS.

TOPSOILING/COMPOSTING (BMP C125)
STRIP TOPSOIL UNDER PAVEMENT, WALKS AND BUILDING. STOCKPILE SEPARATELY FOR USE ON PROJECT LANDSCAPING.

SURFACE ROUGHENING (BMP C130)

TRACK WALK SLOPES STEEPER THAN 3:1.
DUST CONTROL (BMP C140)

CONTRACTOR SHALL IMPLEMENT MEASURES TO PREVENT WIND TRANSPORT OF DUST FROM SOIL SURFACES. SUCH MEASURES CAN INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING: MULCHING AREAS NOT USED FOR VEHICLE ACCESS, REDUCING SPEEDS ON HAUL ROADS, SPRINKLE EXPOSED SURFACES WITH WATER, SURFACE HAUL ROADS WITH GRAVEL.

INTERCEPTOR DIKE AND SWALE (BMP C200)

INSTALL INTERCEPTOR SWALES PER PLAN DETAIL TO DIRECT CONSTRUCTION RUNOFF TO THE TEMPORARY INFILTRATION POND.

INSTALL CHECKDAMS IN INTERCEPTOR SWALES PER PLAN DETAIL. STORM INLET PROTECTION (BMP C220)

WEST MAIN STREET: PLACE INSERTS PER PLAN DETAIL IN EXISTING CATCH BASINS AS INDICATED ON THE PLAN. ONSITE CATCH BASINS: AS NEW CATCH BASINS ARE INSTALLED, THESE SHALL ALSO BE PROTECTED UNTIL THE DRAINAGE AREA IS STABILIZED.

SILT FENCE (BMP C233)

INSTALL SILT FENCE IN LOCATIONS INDICATED ON THE PLAN PER STD DETAIL 204

TEMPORARY INFILTRATION POND TO CONTRO

INSTALL TEMPORARY INFILTRATION POND TO CONTROL CONSTRUCTION RUNOFF.

#### MAINTENANCE OF BMP'S

ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE MAINTAINED AND REPAIRED AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. FACILITIES SHALL BE INSPECTED AT A MINIMUM ON A WEEKLY BASIS AND IMMEDIATELY AFTER ANY RUNOFF PRODUCING RAIN EVENT. ALL MAINTENANCE AND REPAIR SHALL BE CONDUCTED IN ACCORDANCE WITH MARYSVILE STANDARDS. AT A MINIMUM, REPAIRS TO BMP'S SHALL TAKE PRECEDENT OVER OTHER SITE WORK AND COMPLETED PRIOR TO CLOSING THE SITE OF THE NIGHT. TRAPPED SEDIMENT MUST BE REMOVED OR STABILIZED ON SITE. DISTURBED SOIL AREAS RESULTING FROM REMOVAL SHOULD BE PERMANENTLY STABILIZED.

PRESERVING NATURAL VEGETATION (BMP C101)

INSPECT FLAGGED/FENCED AREAS REGULARLY TO MAKE SURE FLAGGING/FENCING HAS NOT BEEN REMOVED. IF TREE ROOTS HAVE BEEN EXPOSED OR INJURED, RE-COVER AND/OR SEAL THEM.

HIGH VISIBILITY FENCING (BMP C103)

INSPECT FENCING AND REPAIR DAMAGED SECTIONS.
STABILIZED CONSTRUCTION ENTRANCE (BMP C105)

THE ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO EXISTING ACCESS ROADS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 2-INCH STONE, AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.

CONSTRUCTION ROAD STABILIZATION (BMP C107)

INSPECT STABILIZED AREAS REGULARLY, ESPECIALLY AFTER LARGE STORM EVENTS. ADD GRAVEL IF NECESSARY AND RESTABILIZE ANY AREAS FOUND TO BE ERODING. TEMPORARY SEEDING OF STRIPPED AREAS (BMP C120)

SEEDING SHOULD BE SUPPLIED WITH ADEQUATE MOISTURE. SUPPLY WATER AS NEEDED, ESPECIALLY IN ABNORMALLY HOT OR DRY WEATHER OR ON ADVERSE SITES. WATER APPLICATION RATES SHOULD BE CONTROLLED TO PREVENT RUNOFF.
RE-SEEDING - AREAS WHICH FAIL TO ESTABLISH VEGETATIVE COVER ADEQUATE TO PREVENT EROSION SHALL BE RE-SEEDED AS SOON AS SUCH AREAS ARE IDENTIFIED.

MULCHED AREAS SHOULD BE CHECKED PERIODICALLY, ESPECIALLY FOLLOWING SEVERE STORMS. DAMAGED AREAS OF MULCH OR TIE-DOWN MATERIAL SHALL BE IMMEDIATELY REPAIRED.
PLASTIC COVERING (BMP C123)

CHECK REGULARLY FOR RIPS AND PLACES WHERE THE PLASTIC MAY BE DISLODGED.

BETWEEN THE PLASTIC AND THE GROUND SHOULD ALWAYS BE MAINTAINED. ANY AIR

BUBBLES FOUND SHOULD BE REMOVED IMMEDIATELY OR THE PLASTIC MAY RIP DURING THE NEXT WINDY PERIOD. RE-ANCHOR OR REPLACE THE PLASTIC AS NECESSARY.

TOPSOILING (BMP C125)

INSPECT FOR DAMAGE FROM RAINFALL AND SHEET FLOW. REGRADE AS NECESSARY SURFACE ROUGHENING (BMP C130)
REPEAT AS NECESSARY

DUST CONTROL (BMP C140)
RESPRAY AREA AS NECESSARY TO PREVENT WIND EROSION.

CHECKDAMS (BMP C207)

INTERCEPTOR DIKE AND SWALE (BMP C200)
REPAIR ANY ERODED AREAS IN THE SWALE WITH THE SAME ROCK AS USED IN THE CHECKDAMS.

REMOVE SEDIMENT WHEN IT REACHES ONE HALF THE DEPTH OF THE DAM.

STORM DRAIN INLET PROTECTION (BMP C220)

FOR SYSTEMS USING FILTER FABRIC: INSPECTIONS SHOULD BE MADE ON A REGULAR

FOR SYSTEMS USING FILTER FABRIC: INSPECTIONS SHOULD BE MADE ON A REGULA BASIS, ESPECIALLY AFTER LARGE STORM EVENTS. IF THE FILTER BAG BECOMES CLOGGED, IT SHOULD BE CLEANED OR REPLACED.

SILT FENCE (BMP C233)

INSPECT IMMEDIATELY AFTER EACH RAINFALL, AND AT LEAST DAILY DURING PROLONGED RAINFALL. REPAIR AS NECESSARY.

SEDIMENT MUST BE REMOVED WHEN IT REACHES APPROXIMATELY ONE THIRD THE HEIGHT OF THE FENCE, ESPECIALLY IF HEAVY RAINS ARE EXPECTED.

TEMPORARY INFILTRATION POND
REMOVE ACCUMULATED SEDIMENT FROM THE BASE OF THE POND WHEN WATER
BEGINS TO STAND IN THE POND RATHER THAN INFILTRATE.

VERTICAL DATUM
NAVD 88 GEOID 12A
ESTABLISHED BY GPS

#### LEGEND

FOUND MONUMENT IN CASE

SET IRON PIN #28074

FOUND REBAR AS NOTED

SATELLITE DISH ANTENNA

SET IRON PIN #28074 FOR LINE ONLY

□ CATCH BASIN

₩ WATER VALVE

W ■ POWER METER

▲ CONTROL POINT

⊥L SIGN POST

CEDAR TREE

FIR TREE

HEMLOCK TREE

F FRUIT TREE (AS NOTED)

DECIDUOUS TREE (AS NOTED)

© COTTONWOOD TREE

ARBORVITAE

SIRE HYDRANT

-Q- POWER POLE W/ U.G. FEED

<del>×××</del> FENCE LINE

A A A TENOL

— G— GAS LINE

— ss — SEWER LINE
— sp — STORM DRAIN LINE

CLEARING LIMITS (BMP C101)

SILT FENCE
(BMP C233)

- · · · - INTERCEPTOR SWALE

TEMPORARY INLET PROTECTION (BMP C220)

REMOVE EXISTING TREES

#### LAND DISTURBING AREA

**Total Site Area** 78,934 sf (1.81 ac)

Impervious Area
New Impervious
Replaced Impervious
New + Replaced Impervi

New + Replaced Impervious 60,403 sf

Site Grading

- cy - cy

59,761 sf

642 sf

DRAWN BY: DWC
CHECKED BY: DWH
DATE: 9/7/2017
JOB #: 17-179
SCALE: 1" =

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**REVISIONS** 

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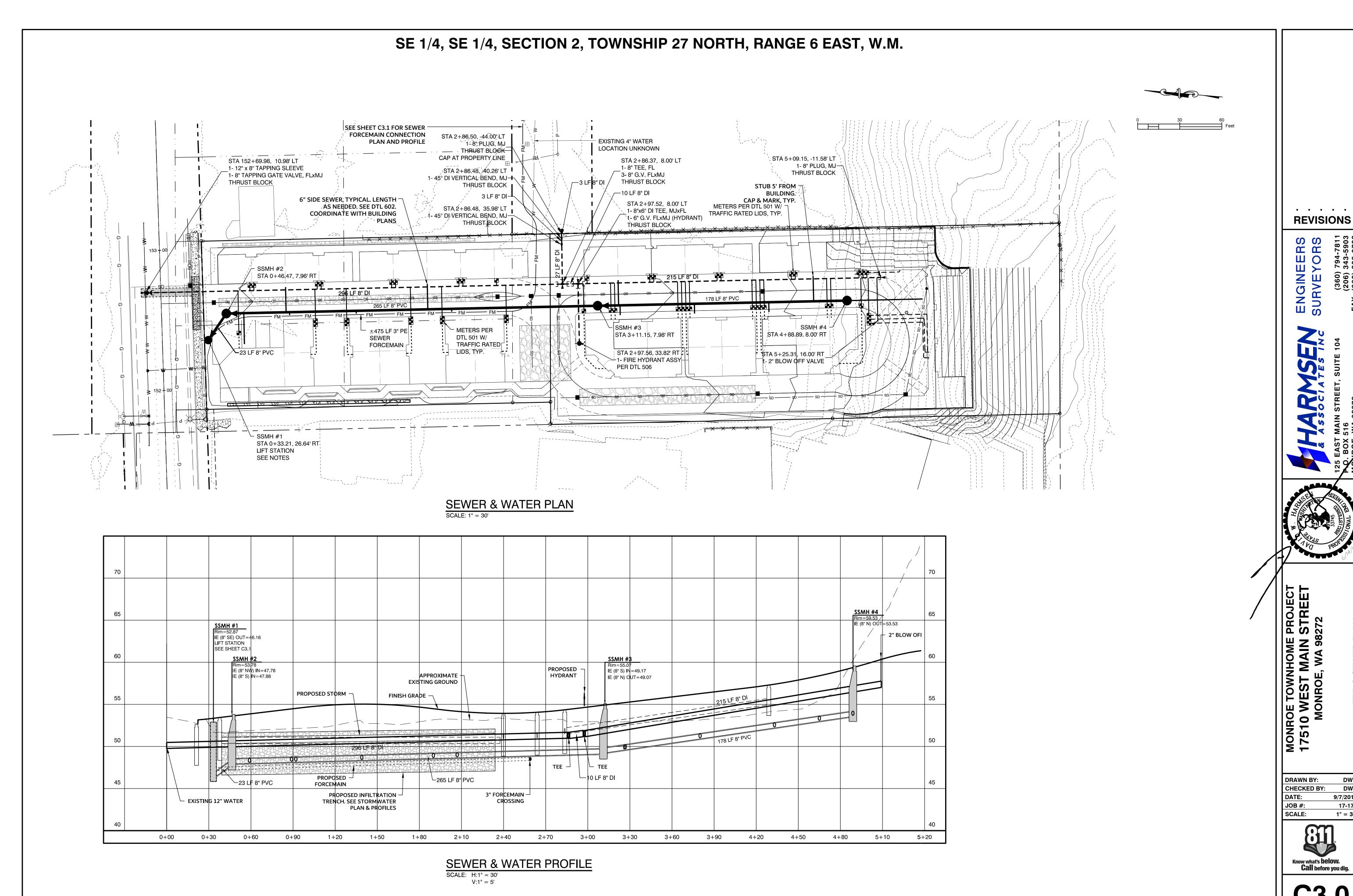
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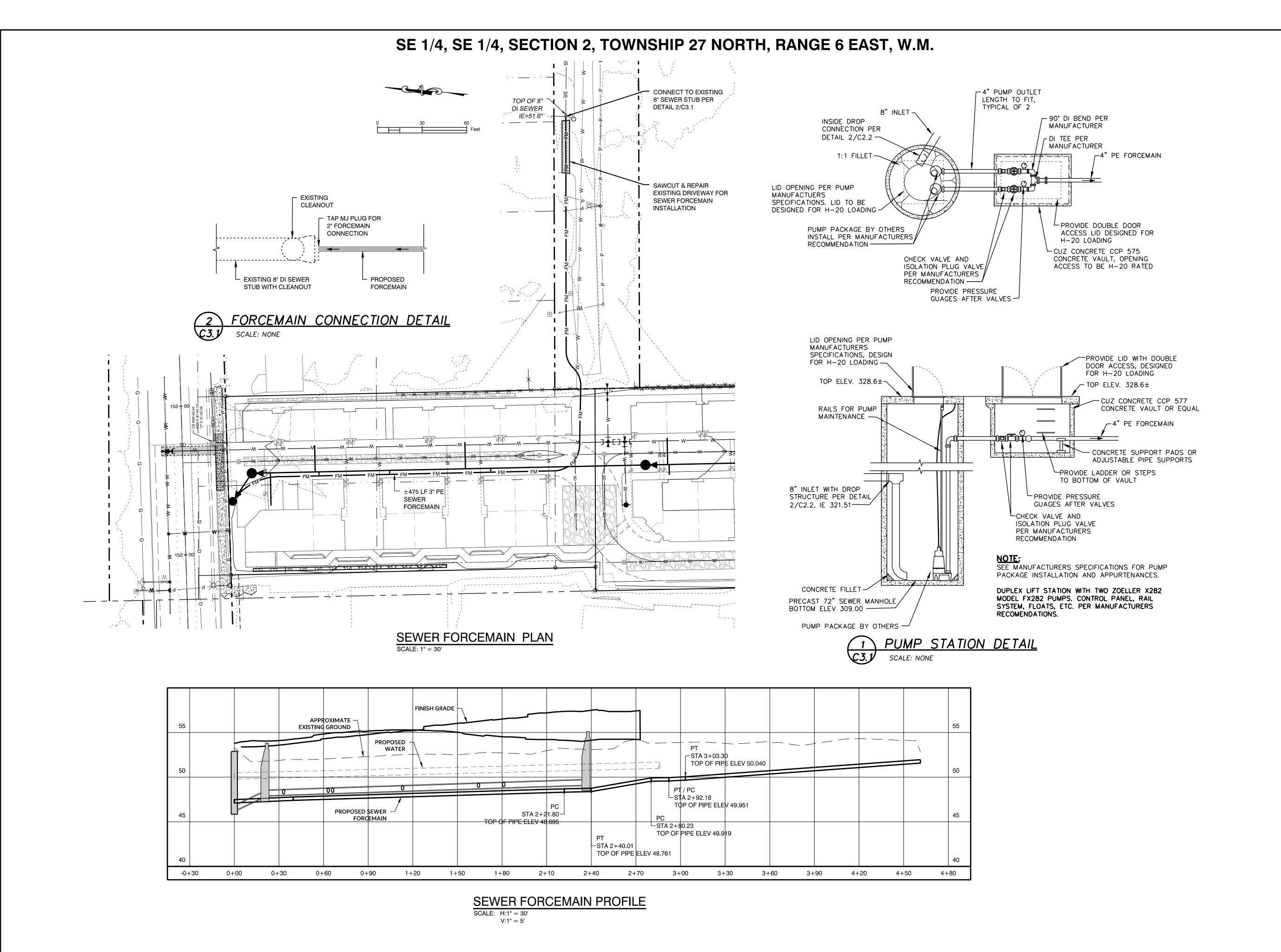
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P:\WORK\PROJECTS\2017\17-179 VUONG\CE\DWG\SHEETS\C3.0 WATER & SEWER PLAN.DWG 6/15/2018

9/7/2017

1" = 30'



**REVISIONS** 

ENGINEERS

DRAWN BY:	DW
CHECKED BY:	DW
DATE:	9/7/201
JOB #:	17-17
SCALE:	1"



#### SE 1/4, SE 1/4, SECTION 2, TOWNSHIP 27 NORTH, RANGE 6 EAST, W.M. FRAME AND COVER **SIDEWALK** CARSON 910 BOX OR EQUAL GASKETED CAP (REMOVE GASKET) GASKET x GASKET x GASKET 2' MIN COVER SPIGOT CAP - 10 GAUGE INSULATI LOCATE WIRE MINIMUM 6-INCH DIAMETER INSIDE RIGHT-OF-WAY OR MECHANICAL CEMENT DRAIN GRAVEL CONCRETE WRAPPED WITH 10 GAUGE INSULATED **GREEN TRACER WIRE** FILTER FABRIC **CLASS 4000** SEWER MAIN SIZE VARIES PVC SLEEVE 2 x 4 x 8'-0" LOCATION OST PAINTED GREEN WITH THE "S" AND DEPT TO IE PAINTED WHITE FOR SEWER AND FACING THE STREET 6" GATE VALVE NO BREAKS IN LINE PAVED AREAS **UNPAVED AREAS** CONCRETE THRUS UNDISTURBED NATIVE SOIL WIDE BAND STAINLESS STEEL SERVICE SADDLE WITH IRON PIPE THREADS. FORD STYLE FS101 OR EQUAL. WHEN WATER MAIN MATERIAL IS C900 PVC PIPE THERE SHALL BE A MINIMUM OF 3 FEET BETWEEN TAPS AND STAGGER TAPS A MAXIMUM OF 45 DEGREES VERTICALLY. WITH ALL OTHER PIPES MATERIALS THERE SHALL BE A MINIMUM OF 2 FEET BETWEEN TAPS. HYDRANTS AND ALL MATERIALS TO BE APWA OR AWWA APPROVED. 1" - MUELLER B-20013 IPS BALL CORPORATION STOP - 300 PSI FIRE HYDRANT SHALL BE M&H NO. 929, MUELLER CENTURION, OR WATEROUS WITH 5 1/4" VALVE MUELLER C110 COMPRESSION FITTING. FEMALE IRON PIPE THREAD BY FEMALE COPPER TUBE SIZE. 1 PIPE AND FITTINGS SHALL BE PVC ASTM 3034 (SDR 35). TWO 2 1/2" NST HOSE PORTS, AND ONE NST 4" STORZ FITTING ON 4 1/2" STEAMER PORT FACING STREET. OR AS OTHERWISE DIRECTED. 1 INCH (MINIMUM) <u>COPPER TUBE SIZE</u> HIGH DENSITY WEIGHT POLYETHYLENE (200 PSI) OR 1 INCH COPPER TUBING TYPE K. SAND BEDDING FOR SERVICE LINE IS REQUIRED. 1-1/4" OPERATING NUT AND CAP NUT FOR 2-1/2" PORTS. BREAK-OFF HYDRANT BASE FLANGE. 2 A TEE WYE OR SWEEP MUST BE INSTALLED. WHERE MORE THAN ONE BELL JOINT IS USED A FIELD LOCK GASKET SHALL BE INSTALLED STRAIGHT TEES ARE NOT ACCEPTABLE. E) METER SETTERS SHALL BE A MUELLER 110 COMPRESSION VERTICAL INLET WITH PADLOCK WINGS, DUAL CHECK VALVE AND HORIZONTAL 4 " THICK X 3' X 3' CONCRETE PAD WITH EXPANSION STRIP AROUND HYDRANT TAIL UNION OUTLET. 3/4" X 5/8" COPPER METER SETTER SHALL BE B24104-2 12" OR APPROVED EQUAL. 1" COPPER METER SETTER SHALL BE HYDRANT SHALL SIT IN THE CENTER OF THE PAD. CONCRETE SHALL BE CLASS 3000. 4. PROVIDE FOR VEHICULAR TRAFFIC PROTECTION WHEN NECESSARY PER STD. PLAN 507 $\left( \ \mathsf{F} \ ight) \ \ \ \mathsf{METER}$ BOXES IN $\mathsf{NON}$ TRAFFIC AREAS SHALL BE CARSON METER BOX #1220113 OR APPROVED EQUAL I.E. PER PLANS BREAK-OFF FLANGE TO BE 2" TO 7" ABOVE GROUND LEVEL METER BOXES IN <u>TRAFFIC AREAS</u> SHALL BE OLD CASTLE 1527 WITH SOLID DUCTILE IRON LIDS OR APPROVED EQUAL. SPIGOT PLUG OR CAP 6. 1/2 CY DRAIN ROCK WRAPPED WITH 6 MIL. POLYETHYLENE SHEETING. METER BOXES ARE TO BE FIRMLY SUPPORTED WITH SETTER CENTERED IN BOX SIDE SEWER LAID ON UNIFORM SLOPE 2 INCH SCHEDULE 40 PVC CASING UNDER PAVEMENT AND SIDEWALK FIRE HYDRANT BODY SHALL BE PAINTED WITH TWO COATS OF SAFETY RED SHERWIN WILLIAMS INDUSTRIAL ENAMEL B54R38. FIRE HYDRANT BONNET AND CAPS SHALL BE PAINTED WITH SHERWIN WILLIAMS COROTHANE(1) M10-ALUMINUM B65S14. **CAST IRON** SIDE SEWER PIPE AND BEDDING 8. LANDSCAPING SHALL BE PLANTED AND MAINTAINED IN A MANNER SO AS TO PROVIDE 3' CLEARANCE FROM THE E HIGH DENSITY WEIGHT POLYETHYLENE (200 PSI) OR 1" COPPER PIPE TYPE K. FOR NEW CONSTRUCTION EXTEND TEN FEET . CUSTOMER SIDE SHALL BE BRASS TO POLY (OR COPPER) CONNECTION. LOCKING 3/4" FEMALE IPS BRASS COUPLER TO 3/4" MALE 1PS X 1" C110 COMPRESSION FITTING. NO TWO PIECE UNIONS ALLOWED ON CITY SIDE, 9. THERE SHALL BE AT LEAST 1' OF CLEARANCE BETWEEN HYDRANT & SIDEWALK. FRAME AND COVER WHEN TWO OR MORE METER BOXES ARE WITHIN 6' OF EACH OTHER A 2 INCH SCHEDULE 40 PVC CONDUIT SHALL LINK TWO BOXES TO ACCOMMODATE MXU RADIO READ UNITS. HOLE SAW CONDUIT HOLES 4" BELOW TOP OF BOX AS SHOWN DESIGNATION DESCRIPTION **GRAVITY SEWER SVC CONNECTION** SIDE SEWER CLEANOUT 3/4" X 5/8" & 1" WATER SERVICE FIRE HYDRANT ASSEMBLY **2** 501 JAN 11, 2016 NOT TO SCALE NOT TO SCALE NOT TO SCALE MAR 28, 2013 NOT TO SCALE JAN 11, 2016 EDGE OF OPENING STORZ TYPE FIRE DEPT CONNECTION W/30° ELBOW NON-SWIVEL INCLUDE 4" KNOX FDC CAP 4" or 6" GALV — 36" FOR PIPE 12" & SMALLER FLANGE 6" TO 10" ABOVE FLOOR — 48" FOR PIPE OVER 12" MAX DEPTH NOT TO EXCEED 60" 4" TO 6" GALV STEEL----7 - 2 - 7 - 2 - 7 - 2 - 7 - 2 -1" SADDLE TAP BALL MJ x MJ WITH DRIP CHECK VALVE FL x PE SPOOL MEGA LUGS SUPPLY AND DRY SIDES (A) UL-FM LISTED SOFT SEATED STATE APPROVED DOUBLE CHECK DETECTOR VALVE ASSEMBLY **ELEVATION** INCLUDING: 2-0.S.& Y RESILIENT SEATED GATE VALVES, TEST COCKS, 3/4" BRASS OR COPPER BYPASS WITH INLINE VALVES, 5/8" METER (METER TO READ IN CUBIC FEET), 1" TO 1-1/2" WASHED ROCK AND A 3/4" DOUBLE CHECK VALVE ASSEMBLY. UNDISTURBED EARTH THRUST BLOCK -(B) UNI-FLANGE WITH SET SCREWS OR MJ x FL ADAPTOR WITH MEGALUG OR GALVANIZED (1) IN NON-TRAFFIC AREAS USE: SHACKLE TO MAIN WITH 2-3/4" RODS, OR MJ RETAINER GLANDS. PRECAST CONCRETE VAULT (UTILITY VAULT CO 233-LA, OR APPROVED EQUAL) GRAVEL BACKFILL FOR DRAINS (PCC (C) PRECAST CONCRETE VAULT WITH STEEL ACCESS HATCH (AS MANUFACTURED BY UTILITY VAULT CO OR PLASTIC VALVE BOX (UTILITY VALULT CO 1324-12L OR APPROVED EQUAL) PER WSDOT 9-03.1(3)C) OR AN APPROVED EQUAL). PROVIDE OSHA APPROVED HOT DIPPED GALVANIZED STEEL LADDER FLOOR FLANGE SUPPLY FIRE DEPARTMENT STAND PIPE INSTALL IN SUCH AWAY THAT VAULT ACCESS DOES NOT INTERFERE WITH INSTALLED EQUIPMENT **PROFILE VIEW** A TRAFFIC LOADED BOX MUST BE USED AND LOCATION APPROVED BY THE AND DRY SIDES **CONNECTION WITH STORZ 30° ELBOW** THE CITY OF MONROE PRIOR TO INSTALLATION. (D) DUCTILE IRON PIPE (SIZED AS REQUIRED) CLASS 52. (2) PIPE BENDS SHALL BE OUTSIDE OF THE BOX (E) WATER TIGHT GROUT SHALL BE USED IN ALL VAULT PENETRATIONS. (3) PROVIDE FREE DRAINING GRAVEL (6" MIN). SUPPLY AND DRY LINES TO BE RESTRAINED BY FIELD LOCK GASKETS ON BELL JOINTS. MEGA LUGS AND BLOCKING SHALL BE INSTALLED AT ALL ${\sf (F)}$ 2 - GALVANIZED ADJUSTABLE PIPE SUPPORTS FOR 2 1/2" DIAM AND LARGER PIPE. WATER MAIN -(4) INSTALL UNIONS 2" CAP NATIONAL STANDARD THREAD FIRE SYSTEMS SHALL BE DESIGNED BY A NICET LEVEL 3 DESIGNER/WASHINGTON LICENSED ENGINEER. THE INSTALLER OF THE FIRE (G) GRAVEL FOUNDATION AS REQUIRED. PROTECTION SERVICE UNDERGROUND LINES SHALL BE LICENSED AND CERTIFIED AS REQUIRED BY THE OFFICE OF THE STATE FIRE MARSHALL (F) LOCK TO BE SUPPLIED BY CITY OF MONROE (H) DRAIN, SLOPE TO DAYLIGHT WHEN POSSIBLE OR WORKING SUMP PUMP. 1" SADDLE TAP BALL DRIP WITH 90° DOWNTURN IN A BED OF 1" TO 1-1/2" WASHED ROCK ENVELOPED IN GEO FILTER FABRIC. HEIGHT OF DRIP VALVE BOX AND EXTENSION PER PER STD DWG 512 **PLAN VIEW** FDC TO BE A 4" STORZ NON-SWIVEL 30° DOWN ELBOW WITH LOCKING FDC STORZ CAP (MODEL #5001 4" HARD ANODIZED ALUMINUM FROM WWW.KNOXBOX.COM). FDC STANDPIPE TO BE PAINTED WITH 2 COATS HIGH GLOSS RUST-O-LEUM FIRE DEPT RED BARREL NO. 1210. DO NOT A PLUMBING PERMIT IS REQUIRED. OBTAIN PERMIT FROM CITY OF MONROE. LEGEND: 2" SUPER HEAVY DUTY RESILIENT SEAT GATE VALVE A PLUMBING PERMIT IS REQUIRED. OBTAIN PERMIT FROM CITY OF MONROE (WATEROUS SERIES 500 OR THOROUGHLY FLUSH LINES PRIOR TO INSTALLATION OF BACKFLOW PREVENTER. CENTER OF FIRE HYDRANT TO CENTER OF FDC TO BE NO MORE THAN 50' AND NO LESS THAN 4' APART. 2. THOROUGHLY FLUSH LINES PRIOR TO INSTALLATION OF BACKFLOW PREVENTER. M&H 3067 OR APPROVED EQUAL (A) MAINGUARD 2" BLOW-OFF HYDRANT 3. DEVICE MUST BE PROTECTED FROM FREEZING CONDITIONS. 3. DEVICE MUST BE PROTECTED FROM FREEZING CONDITIONS. PRESSURE TESTING PER NFPA 24 STANDARDS (200 PSI FOR 2 HOURS WITH NO LOSS.) 4. THE BACKFLOW ASSEMBLY SHALL BE A MODEL APPROVED BY THE STATE. (B) 2" BRASS STREET "L' THE BACKFLOW ASSEMBLY SHALL BE A MODEL APPROVED BY THE STATE. FLUSH PER NFPA 24 STANDARD. FULL FLOWS WITH BURLAP BAGS FOR DEBRIS INSPECTION. FLOW OF FLUSH WILL BE NO LESS THAN 10 CUBIC ALL TEST COCKS ARE REQUIRED TO BE CAPPED. METER BOXES IN <u>NON TRAFFIC AREAS</u> SHALL BE CARSON METER BOX #1220113 OR APPROVED EQUAL. 5. ALL TEST COCKS ARE REQUIRED TO BE CAPPED. FEET PER SECOND. (C) 2" BRASS NIPPLE 6. MAXIMUM HEIGHT OF INDOOR ASSEMBLIES SHALL BE FIVE FEET UNLESS AN OSHA APPROVED SOURCE WATER FOR FLOW TESTING TO BE PROTECTED BY MEANS OF A TEMPORARY DCVA THAT HAS BEEN VERIFIED TESTED BY A BACKFLOW 6. DEVICE MUST BE TESTED AFTER INSTALLATION AND ANNUALLY THEREAFTER BY A METER BOXES IN <u>TRAFFIC AREAS</u> SHALL BE OLD CASTLE 1527 WITH SOLID DUCTILE IRON LIDS OR APPROVED EQUAL. PLATFORM IS PROVIDED. (D) CONCRETE METER BOX FOGTITE OR EQUAL, CARSON ASSEMBLY TESTER. DCVA'S ARE TO BE A MINIMUM OF 4" DIAMETER AND SIZED TO ACHIEVE PROPER FLOW FOR FLUSH AFTER HYDRO TESTING WASHINGTON STATE CERTIFIED BACKFLOW TESTER. TEST RESULTS SHALL BE SENT TO THE HAS BEEN ACHIEVED. FLOW CALCULATIONS TO BE ESTABLISHED BY A NICET LEVEL 3 SYSTEM DESIGNER 1730 IN NON TRAFFIC AREAS AND MID STATES MSBCF DEVICE MUST BE TESTED AFTER INSTALLATION AND ANNUALLY THEREAFTER BY A CITY OF MONROE PUBLIC WORKS DEPARTMENT. 18XL IN TRAFFIC AREAS (DIAMOND PLATE FRAME) METER BOXES ARE TO BE FIRMLY SUPPORTED WITH VERIFICATION OF FLOW RATE AND TESTING BY CITY OF MONROE ONLY. CITY OF MONROE TO OPERATE WATER SYSTEM VALVES. WASHINGTON STATE CERTIFIED BACKFLOW TESTER. TEST RESULTS SHALL BE SENT TO THE . FIRE SUPPLY LINES TO BE CONTROLLED BY MEANS OF A DESIGNATED FIRE CONTROL GATE VALVE CITY OF MONROE PUBLIC WORKS DEPARTMENT. REQUIRES DEVIATION FROM REQUIREMENTS. . ALL DDCV'S FOR FIRE SYSTEM ARE TO BE INSTALLED INTERIOR OF BUILDING UNLESS OTHERWISE APPROVED. FIRE DEPARTMENT CONNECTION --**BLOW-OFF ASSEMBLY** OUTDOOR DCDA, 2.5" AND LARGER DCVA 2" AND SMALLER 4" FDC FOR SPRINKLER AND STANDPIPE

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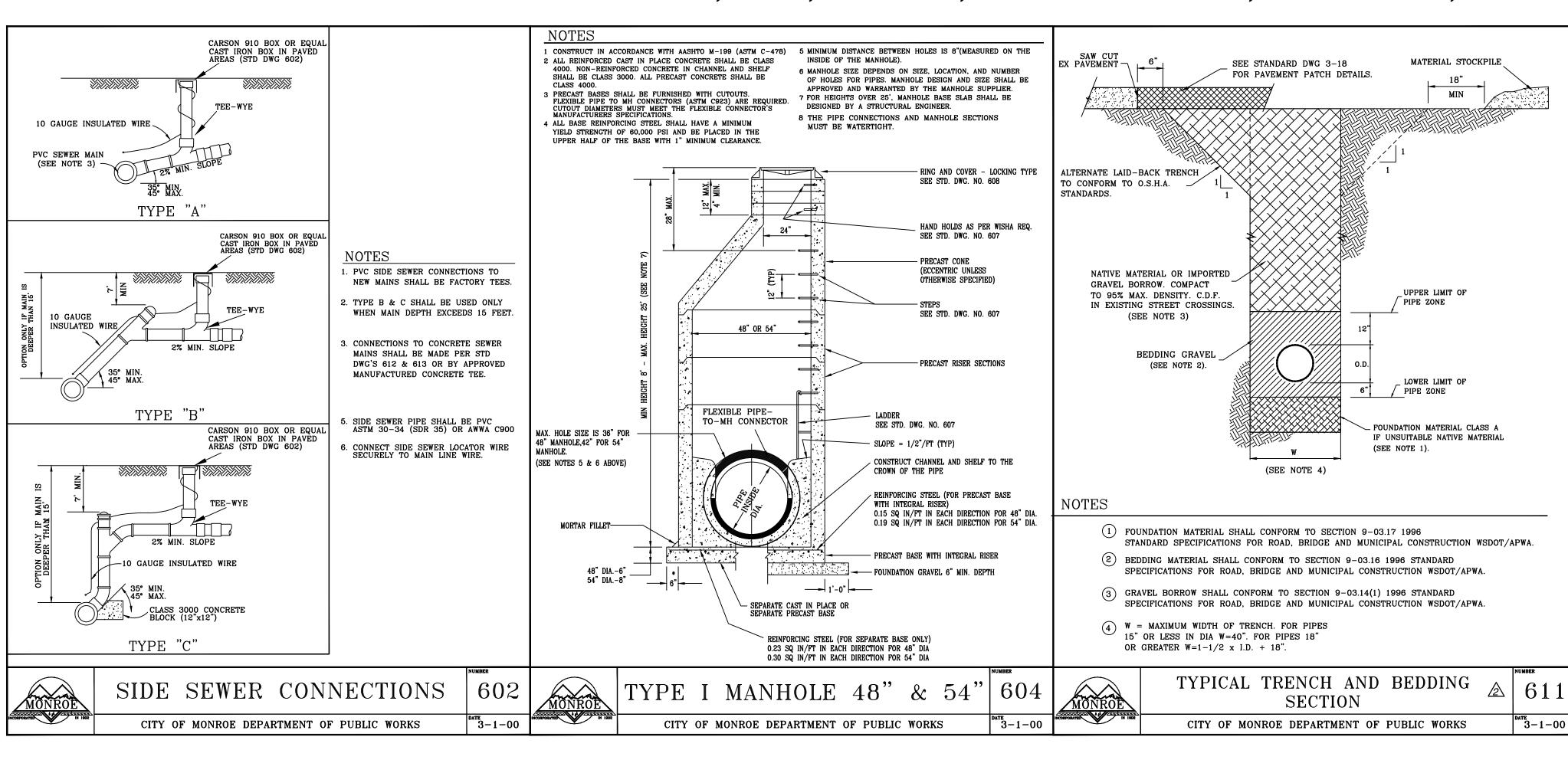
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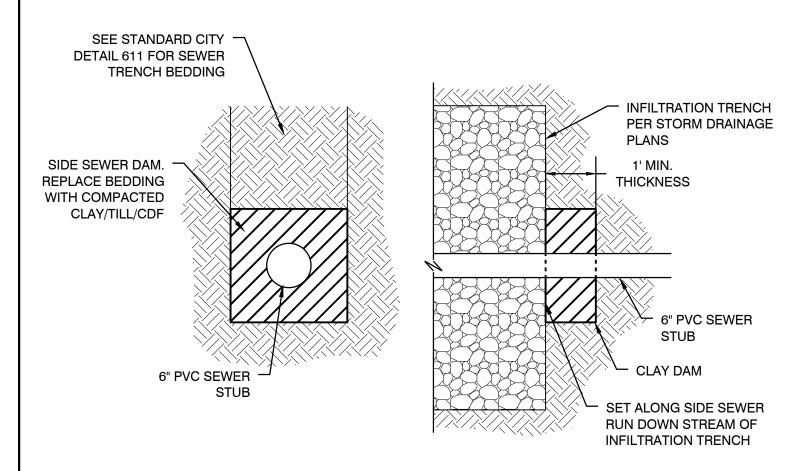
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**REVISIONS** 

## SE 1/4, SE 1/4, SECTION 2, TOWNSHIP 27 NORTH, RANGE 6 EAST, W.M.





# SCALE: NONE SIDE SEWER DAM DETAIL

#### **WATER NOTES:**

- 1. ALL FIRE HYDRANTS SHALL BE MUELLER CENTURION OR M & H STYLE 929. THE BODY IS PAINTED A RUST-O-LEUM RED, # 1210, AND THE BONNET AND CAPS ARE RUST-O-LEUM ALUMINUM #0470. TWO PAINT COATS ARE REQUIRED. INSTALL A BLUE REFLECTOR ONE FOOT OFF CENTERLINE TOWARDS HYDRANT. A MINIMUM CLEARANCE OF 3' SHALL BE MAINTAINED FROM ANY OBSTRUCTIONS. ALL FIRE HYDRANTS INSTALLED IN UNPAVED AREAS SHALL HAVE A 3'X3'X4" CONCRETE PAD PLACED AROUND THE BASE.
- 2. ALL WATER VALVES INSTALLED IN UNPAVED AREAS SHALL HAVE A 2' X 2' X 3" CONCRETE PAD PLACED AROUND THE VALVE BOX.
- 3. WHERE SHACKLE RESTRAINT IS REQUIRED, TIE ROD SHALL BE 3/4" DIA., TIE BOLTS SHALL BE 3/4" STAR NATIONAL PRODUCTS NO. SST7 OR EQUAL, RETAINER CLAMP ASSEMBLIES SHALL BE STAR NATIONAL PRODUCTS NO. S11 OR EQUAL. ALL PARTS ARE TO BE CAD-PLATED.

  4. ALL FITTINGS SHALL BE BLOCKED UNLESS OTHERWISE SPECIFIED.
- 5. ALL PIPE AND FITTINGS NOT DISINFECTED IN PLACE SHALL BE SWABBED WITH 200 PPM CHLORINE
- SOLUTION PRIOR TO INSTALLATION.
  6. IF THE INITIAL CONNECTION OR EXTENSION REQUIRES SHUTTING DOWN AN EXISTING WATER MAIN, THE CITY MAY REQUIRE TWO WEEKS NOTIFICATION IN ORDER TO PLACE A PUBLIC NOTICE IN THE LOCAL PAPER. NO CONNECTION WILL BE ALLOWED ON MONDAY, FRIDAY, OR WEEKENDS. THE MONROE PUBLIC WORKS DEPARTMENT SHALL OPERATE ALL WATER VALVES ON EXISTING SYSTEM.
- 7. CAST IRON FITTINGS SHALL BE USED IN ALL CASES WHERE THE DEFLECTION AT THE PIPE JOINTS EXCEEDS THREE DEGREES EXCEPT ON SWEEP RADIUSES. THE INSPECTOR MAY ALLOW THE CONTRACTOR TO INSTALL NORMAL OR SHORT LENGTHS OF PIPE, PROVIDING THE MAXIMUM DEFLECTION PER JOINT SHALL NOT EXCEED THREE-FOURTHS THE MAXIMUM PERMISSIBLE DEFLECTION AS OUTLINED IN THE PIPE MANUFACTURER'S DATA. DEFLECTION OF JOINTS OF PVC PIPE IS NOT ALLOWED.

  8. THE CONTRACTOR SHALL FLUSH, TEST, AND CHLORINATE THE LINES IN THE PRESENCE OF THE UTILITIES INSPECTOR. LINES SHALL BE PRESSURE TESTED AT 250 PSI WITH 0 LOSS FOR 1 HOUR. WATER SAMPLES WILL BE TAKEN BY THE PUBLIC WORKS DEPARTMENT. SERVICE WILL NOT BE AVAILABLE UNTIL
- THE TESTS ARE RETURNED SATISFACTORY.

  9. WATER MAINS SHALL BE CLASS 52 DUCTILE IRON PIPE.
- 10. ALL FITTINGS AND MATERIALS REMOVED FROM EXISTING MAINS SHALL BE RETURNED TO THE UTILITIES DEPARTMENT.
- 11. FIRE HYDRANTS SHALL STAND PLUMB, BE SET TO THE ESTABLISHED GRADE WITH THE LOWEST OUTLET OF THE HYDRANT NO LESS THAN EIGHTEEN INCHES ABOVE GRADE.
- OUTLET OF THE HYDRANT NO LESS THAN EIGHTEEN INCHES ABOVE GRADE.

  12. ALL WET TAPS SHALL BE DONE BY AN APPROVED PRIVATE CONTRACTOR.

  13. ALL GATE VALVES SHALL BE RESILIENT SEATED. AWWA: C 509, RATED FOR 200 PSI OR GREATER.
- 14. NO CONNECTION TO THE EXISTING MAINS WILL BE ALLOWED EXCEPT BY MEANS OF AN APPROVED BACKFLOW PREVENTION DEVICE PRIOR TO SATISFACTORY FLUSHING, TESTING, DISINFECTION, AND RECEIPT OF SATISFACTORY BACTERIOLOGICAL TEST RESULTS.
- 15. THE 1" METER AND 2" DCV ARE THE SPRINKLER SUPPLY FOR 18 TOWNHOMES WITH INDIVIDUAL NFPA #13D FIRE SPRINKLER SYSTEMS.
- 16. ALL DOMESTIC METERS WILL BE 3/4"x5/8" PER STD DTL 501.

#### **SANITARY SEWER NOTES:**

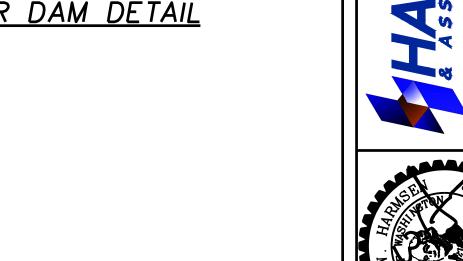
- 1. SANITARY SEWER PIPE TO BE PVC CONFORMING WITH ASTM D-3034, SDR 35. PIPE BEDDING TO BE CLASS B WITH ONE FOOT OF SAND OR PEA GRAVEL
- 2. ALL MANHOLES SHALL HAVE A .10 FOOT DROP BETWEEN INVERT IN AND INVERT OUT UNLESS OTHERWISE SPECIFIED.
- 3. 18" VERTICAL SEPARATION BETWEEN STANDARD WATER AND SEWER LINES IS REQUIRED. WHENEVER FROM 12" TO 17" OF SEPARATION C-900 PVC OR CL. 52 DUCTILE IRON SEWER PIPE MUST BE UTILIZED. IF LESS THAN 12" SEPARATION, PER CITY ENGINEER REQUIREMENT AND AS PER DOE CRITERIA
- FOR SEWER WORKS DESIGN.
  4. ALL MANHOLES SHALL HAVE LOCKING COVERS.
- 4. ALL MANHOLES SHALL HAVE LOCKING COVERS.
  5. ALL NEW MANHOLES SHALL CONFORM TO ASTM C-478, HAVE A MINIMUM INSIDE DIAMETER OF 48", SHALL HAVE RUBBER GASKETED ENTRY COUPLINGS MORTARED INTO THE MANHOLE WALL.
- 6. ALL SIDE SEWERS SHALL BE 6" DIAMETER PIPE AT A MINIMUM 2% SLOPE AND SHALL EXTEND 15' BEYOND PROPERTY LINE.
- 7. ALL SIDE SEWERS SHALL BE CAPPED WITH A WATERTIGHT PLUG AND SHALL BE MARKED FOR LOCATION WITH A 2"X4" BOARD, PAINTED WHITE, MARKED "SEWER" AND NOTING THE DEPTH OF THE STUB. 20 GAUGE LOCATOR WIRE SHALL BE USED AND EXTEND TO TOP OF MARKER BOARD. SEWER STUBS SHALL BE EXTENDED 15 FEET INTO PROPERTY.
- 8. ALL TESTING AND CONNECTIONS TO EXISTING MAINS SHALL BE DONE IN THE PRESENCE OF A REPRESENTATIVE FROM THE CITY OF MONROE.
  9. ALL TRENCHES SHALL BE COMPACTED PRIOR TO TESTING SEWER LINES FOR ACCEPTANCE.
- 10. SIDE SEWERS SHALL BE PRESSURE TESTED AT THE SAME TIME THE MAIN LINE IS TESTED. PRESSURE TESTS WILL BE AT 4.5 PSI FOR 15 MINUTES.

- 11. THE CONTRACTOR SHALL ADJUST ALL MANHOLES FOR FINISH GRADE
- PRIOR TO PAVING. 12. ALL SEWER MAIN EXTENSIONS WIT
- 12. ALL SEWER MAIN EXTENSIONS WITHIN THE PUBLIC RIGHT-OF-WAY OR IN EASEMENTS MUST BE STAKED BY SURVEYOR FOR LINE AND GRADE PRIOR TO STARTING CONSTRUCTION.
- 13. THE CONTRACTOR SHALL INSTALL, AT ALL CONNECTIONS TO EXISTING DOWNSTREAM MANHOLES, PLUGS TO PREVENT FOREIGN DEBRIS FROM ENTERING EXISTING SYSTEM. THE PLUG SHALL REMAIN IN PLACE UNTIL FINAL INSPECTION AND AFTER ANY DEBRIS IS PUMPED FROM THE STRUCTURE.

  14. THE CONTRACTOR SHALL MAINTAIN 10 FEET HORIZONTAL SEPARATION
- BETWEEN WATER AND SEWER LINES.

  15. MINIMUM COVER OVER SEWER LINES IS FIVE FEET UNLESS APPROVED BY CITY ENGINEER.
- 16. THE PROJECT ENGINEER SHALL PREPARE A WSDOE "DECLARATION OF CONSTRUCTION" FOR SUBMITTAL TO THE DEPARTMENT OF ECOLOGY WHEN ALL CONSTRUCTION IS COMPLETE.
- 17. SANITARY SEWERS LOCATED OUTSIDE PUBLIC RIGHT-OF-WAY REQUIRE A20 FOOT EASEMENT DEDICATED TO THE CITY OF MONROE.18. PRIOR TO FINAL ACCEPTANCE THE SANITARY SEWER LINE SHALL BE
- FLUSHED AND VIDEO TAPED AND SUBMITTED TO THE CITY OF MONROE.

  19. ALL SEWER PIPE SHALL BE PLACED ON STABLE EARTH, OR IF IN THE OPINION OF THE CITY INSPECTOR, THE EXISTING FOUNDATION IS UNSATISFACTORY, THEN IT SHALL BE EXCAVATED BELOW GRADE AND BACKFILLED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. PIPE SHALL NOT BE PLACED ON SOD, FROZEN EARTH OR LARGE BOULDERS OR ROCK. SEWER BEDDING SHALL BE CONSTRUCTED TO SMOOTH PROPER GRADE AND SHALL PROVIDE UNYIELDING CONTINUOUS SUPPORT FOR THE



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O WEST MAIN STREET

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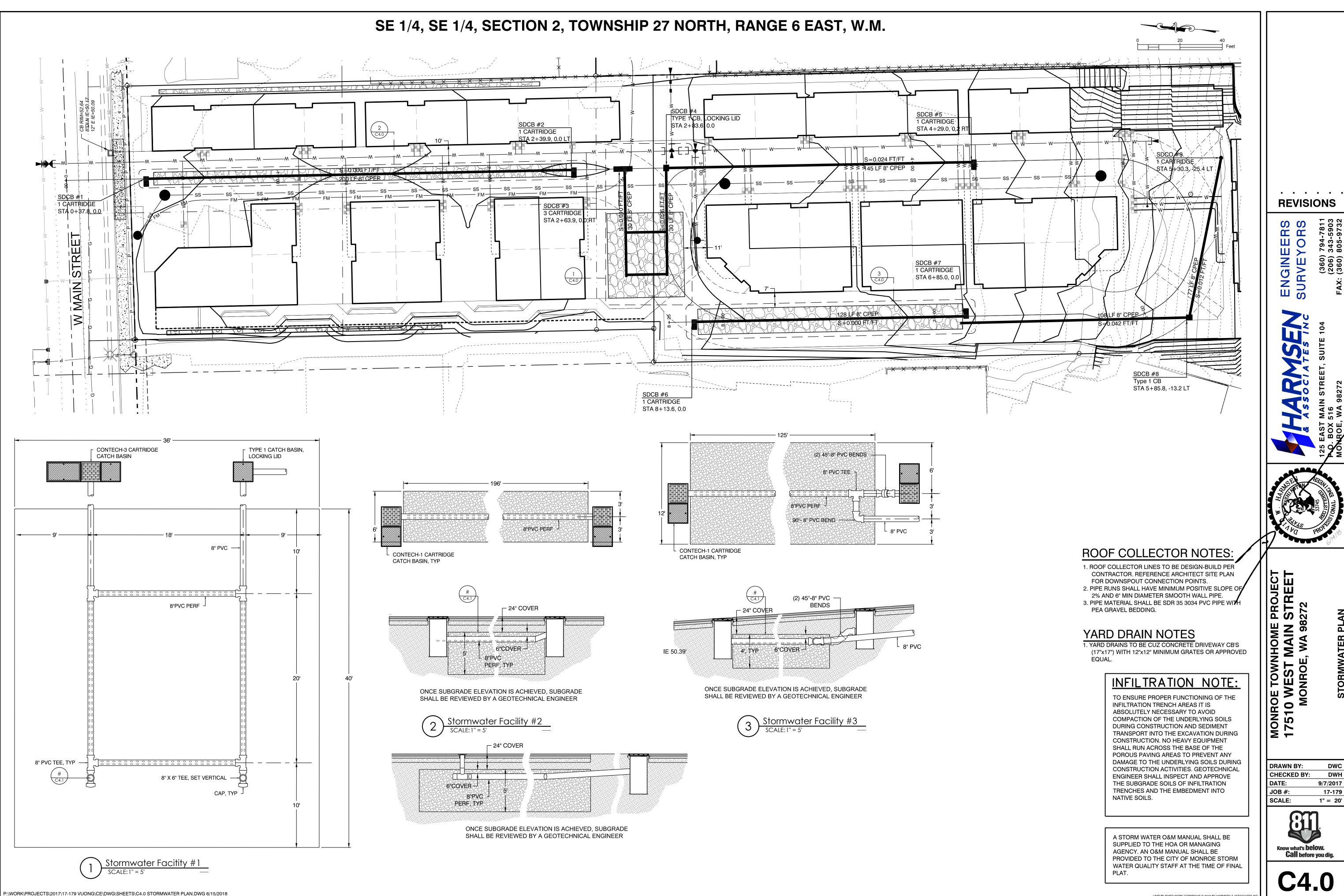
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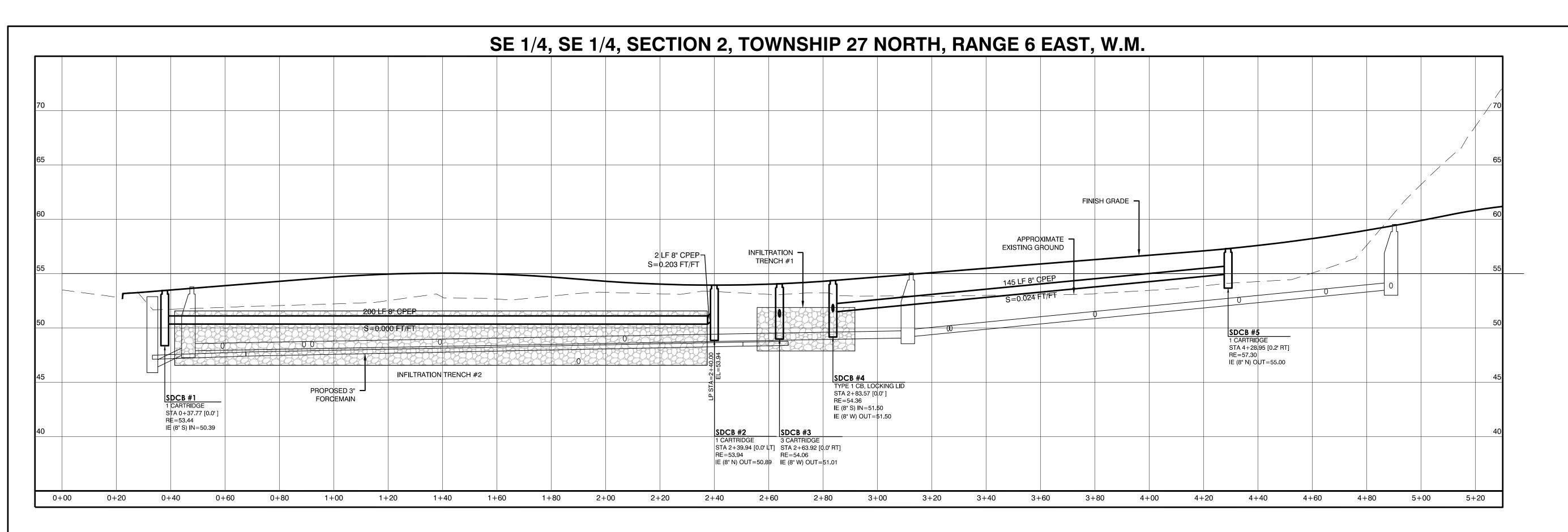
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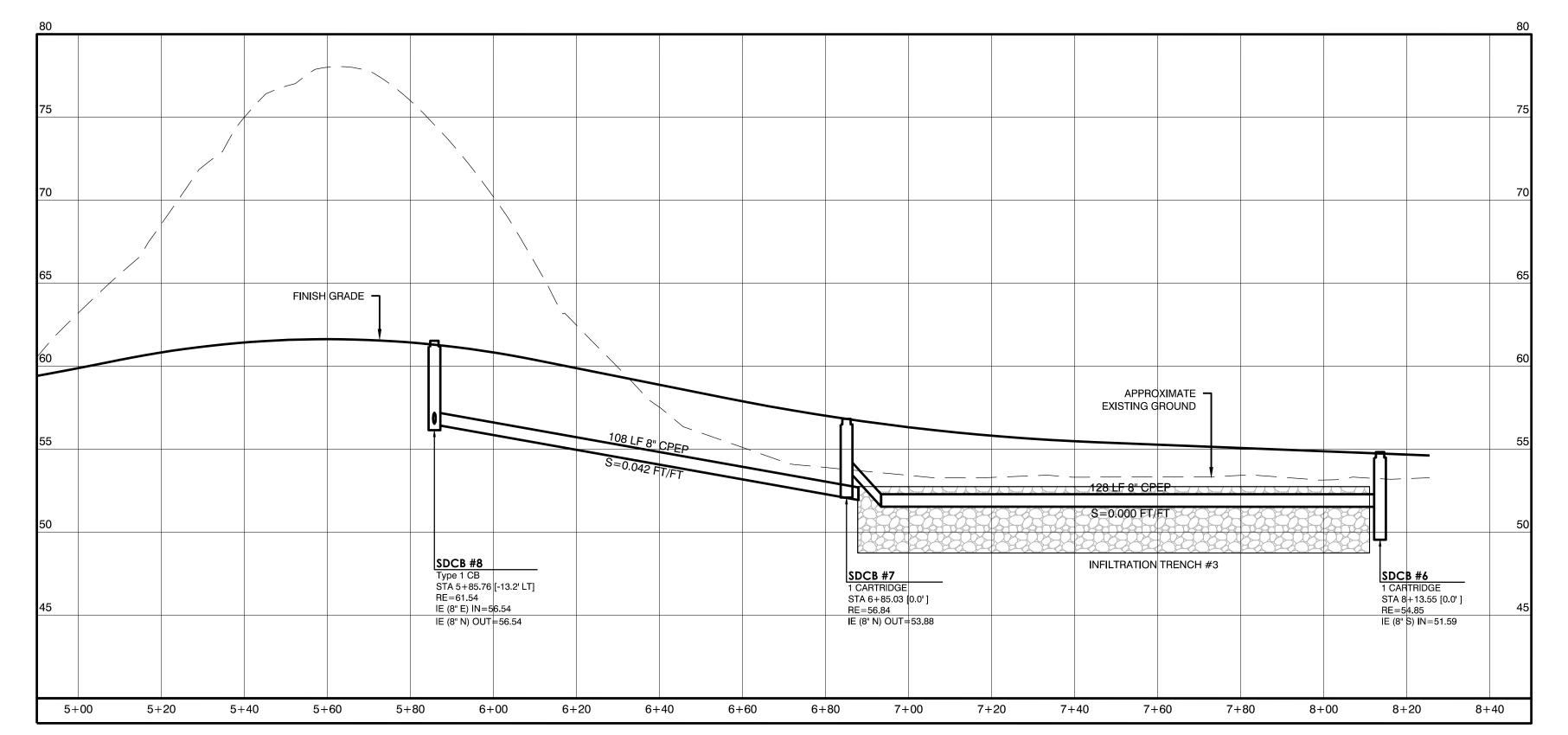
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## MAIN AISLE - PROFILE

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MAIN AISLE - PROFILE

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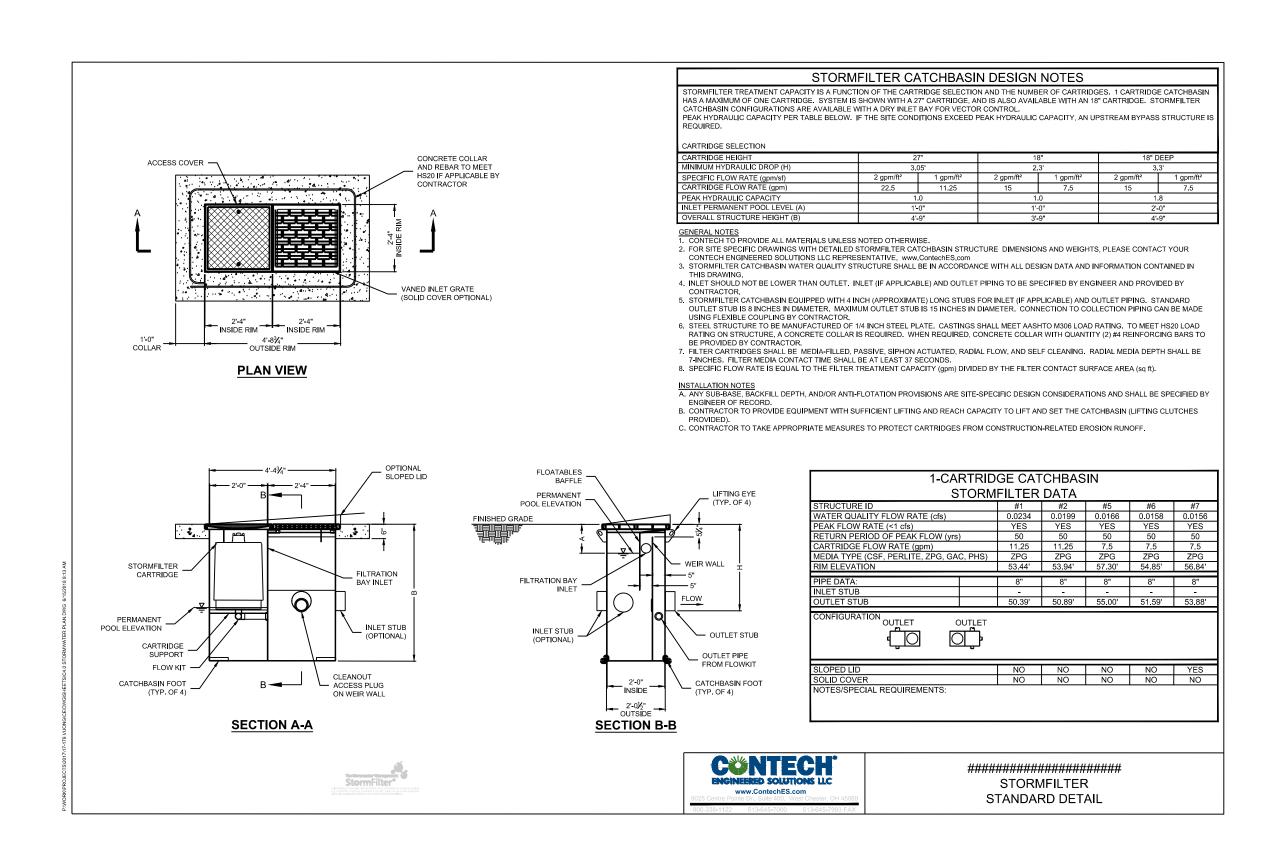
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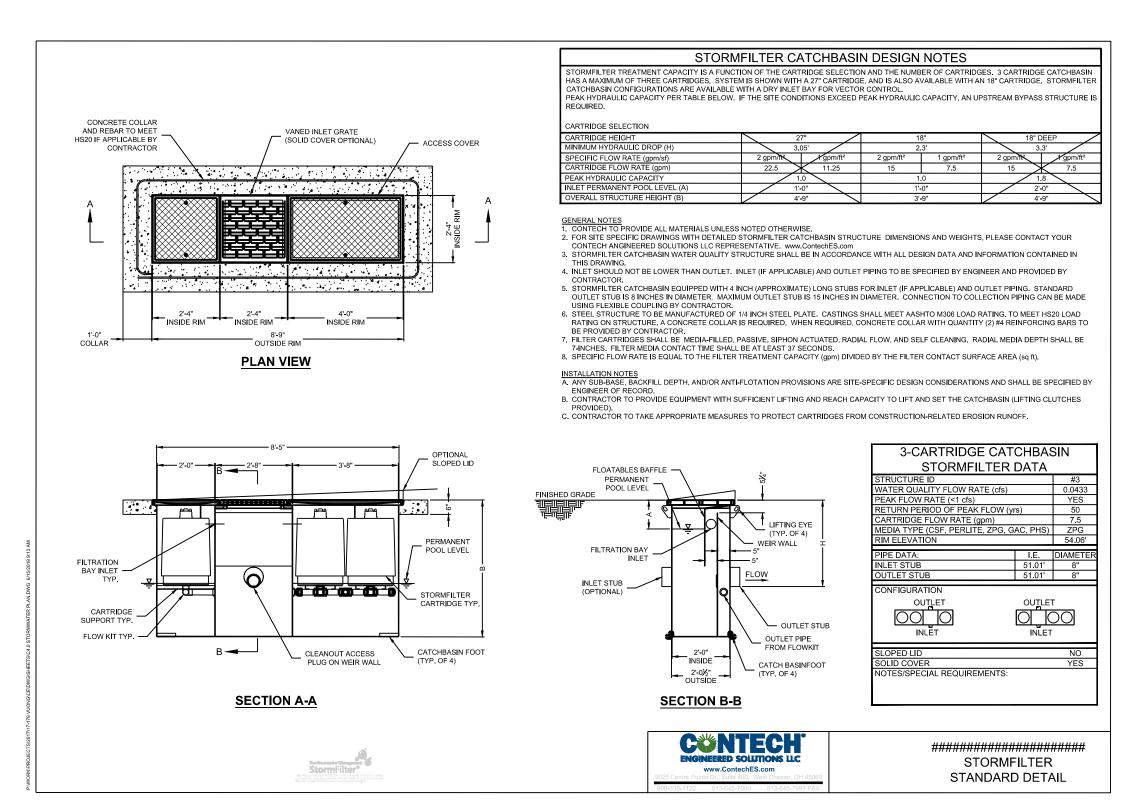
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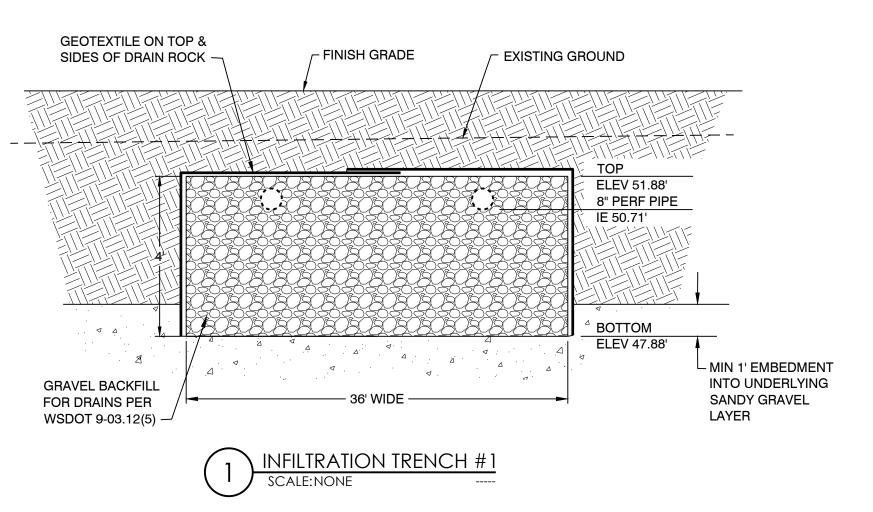


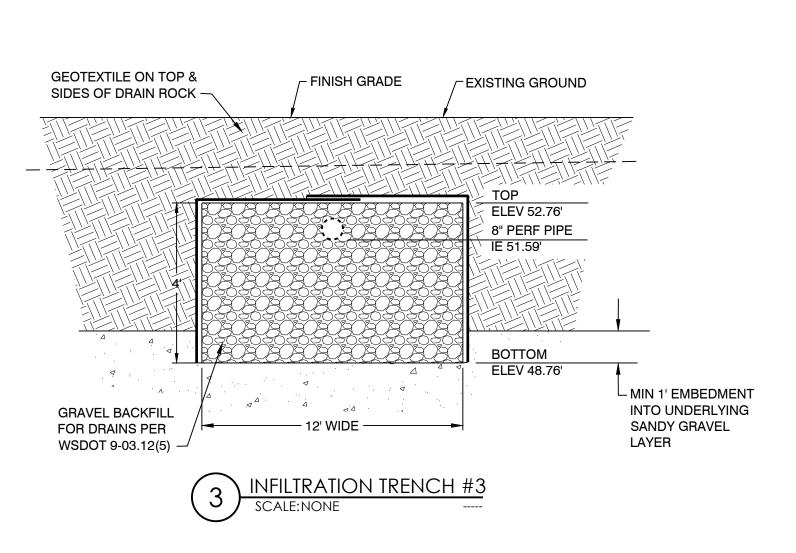
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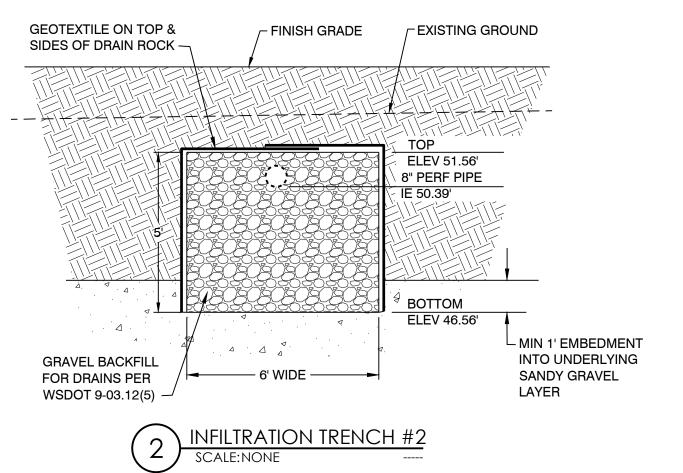
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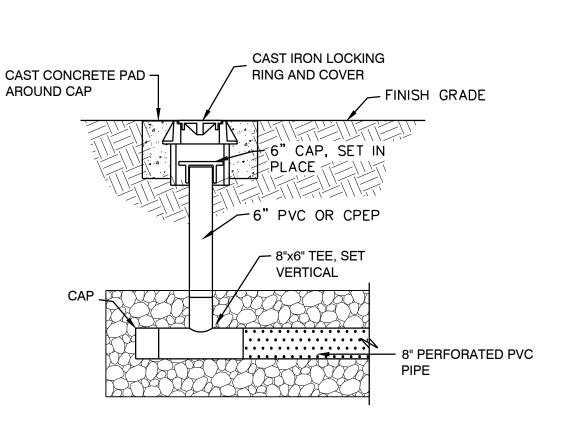












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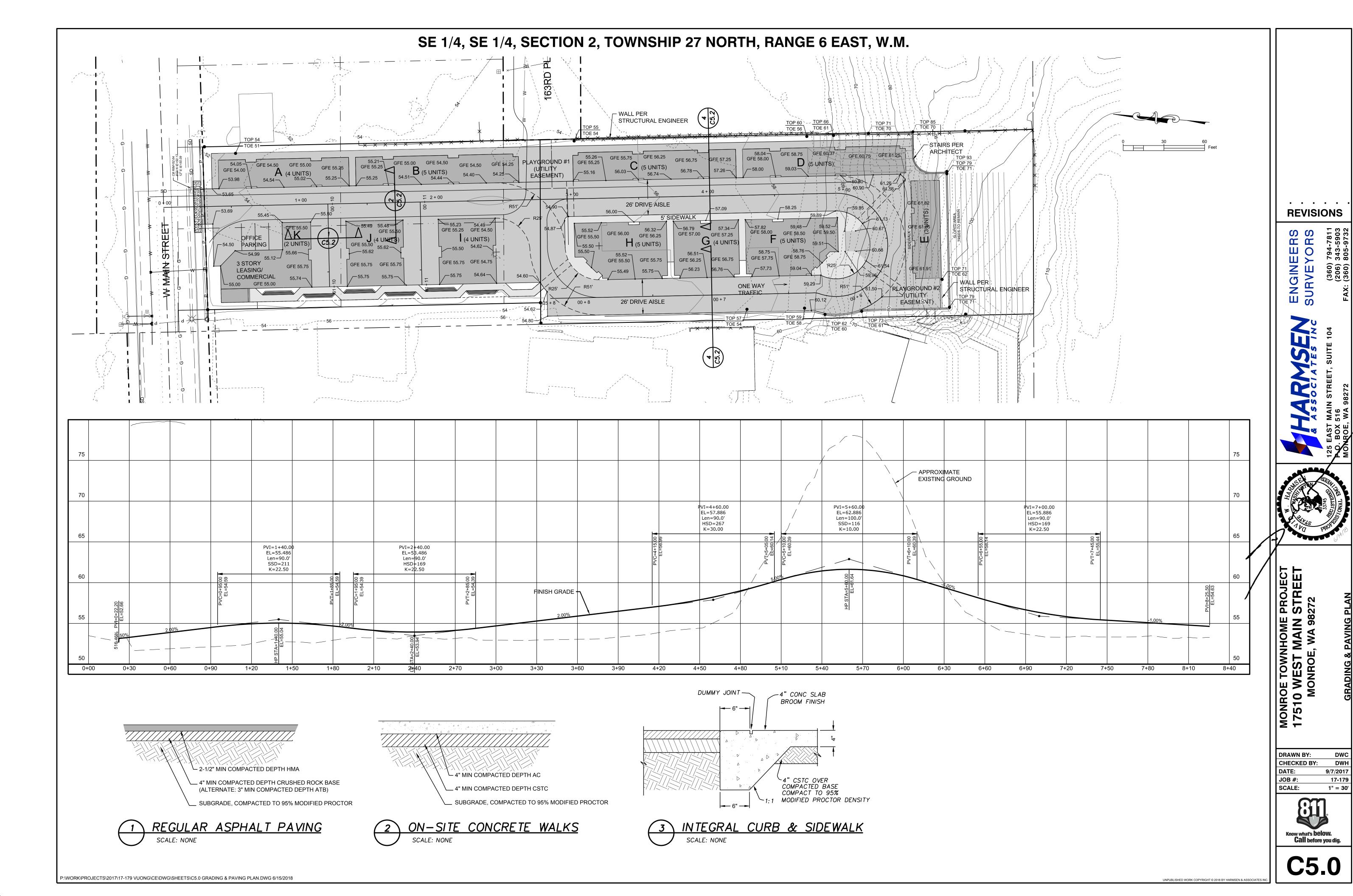
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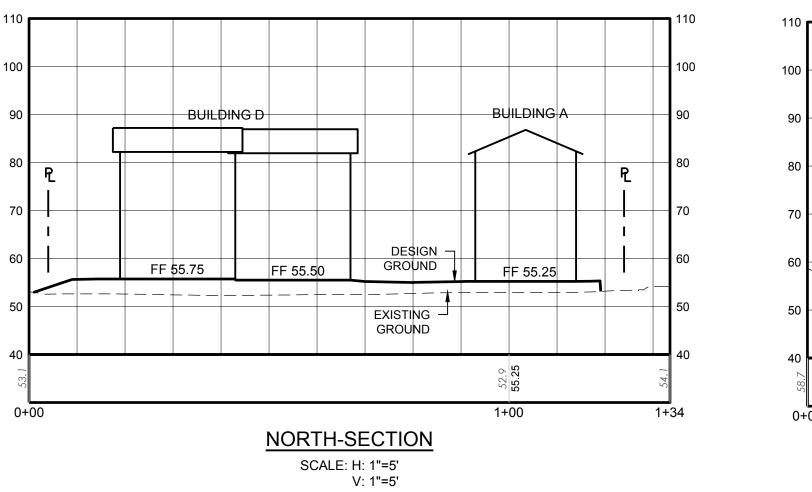
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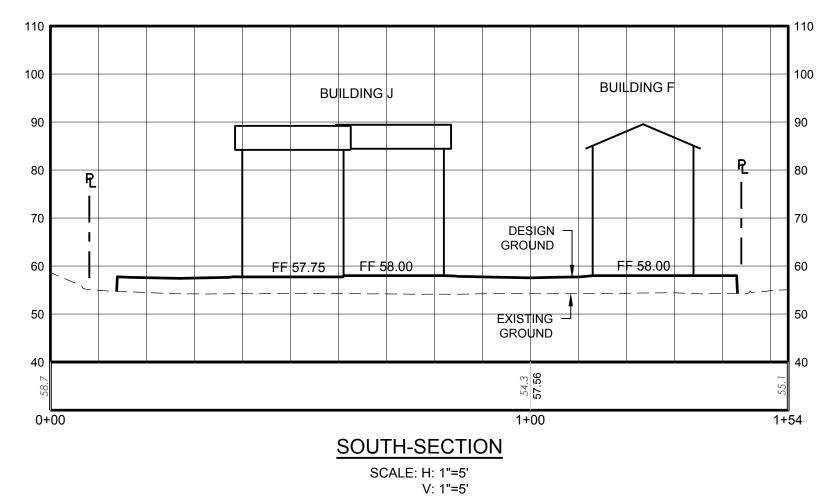
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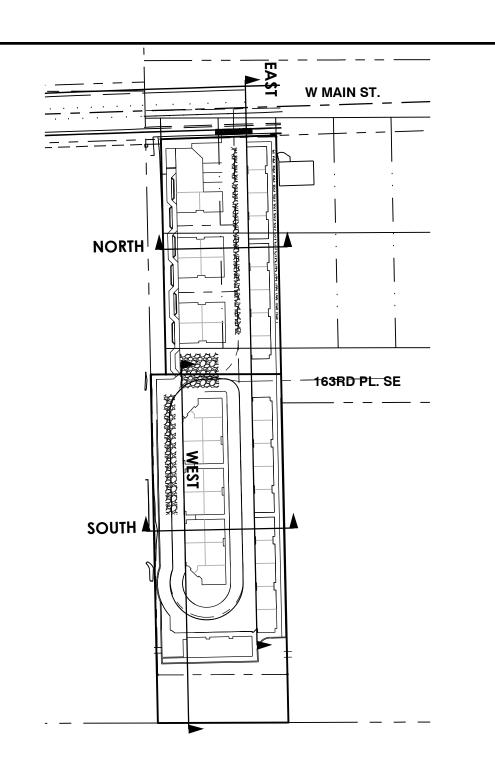


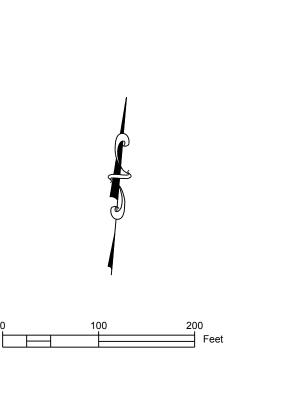


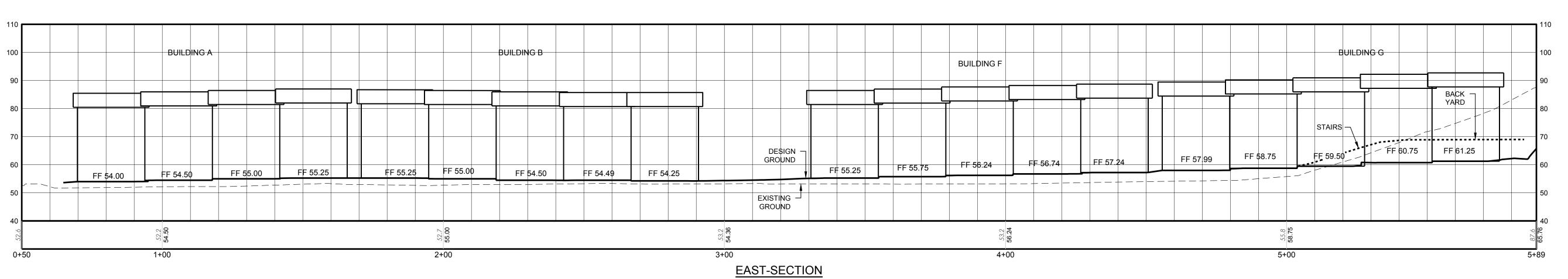
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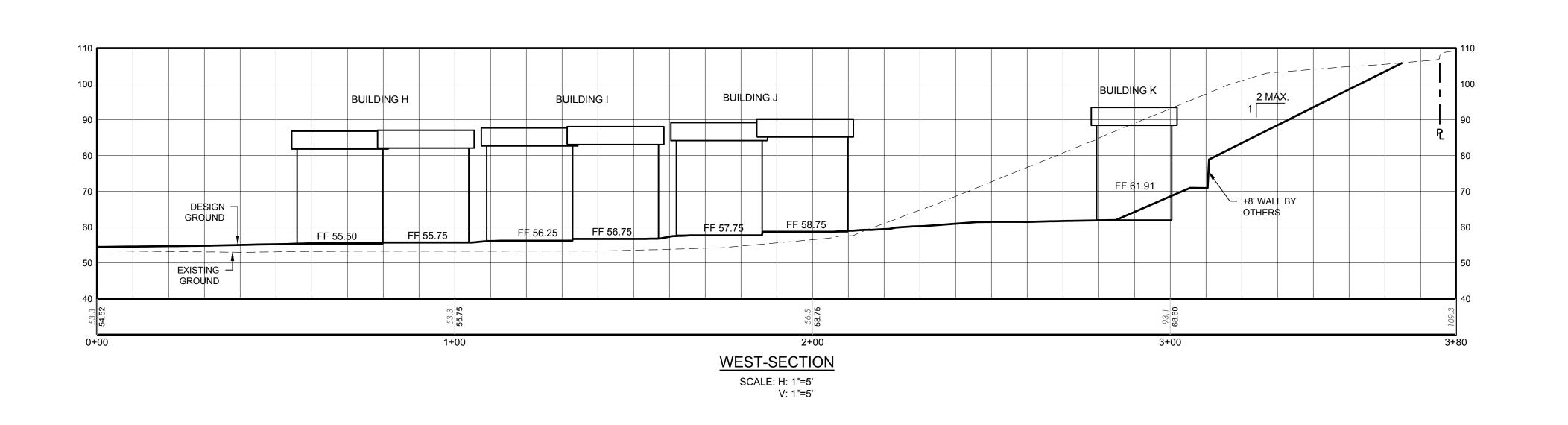












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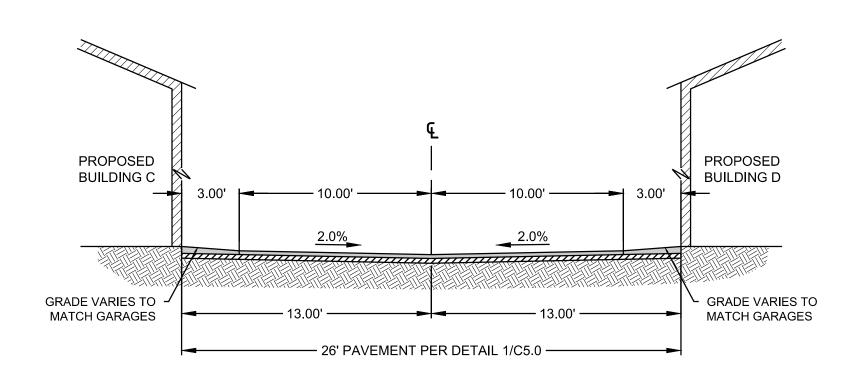
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SCALE: 1" = 20'

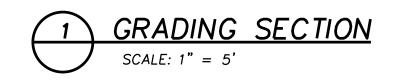


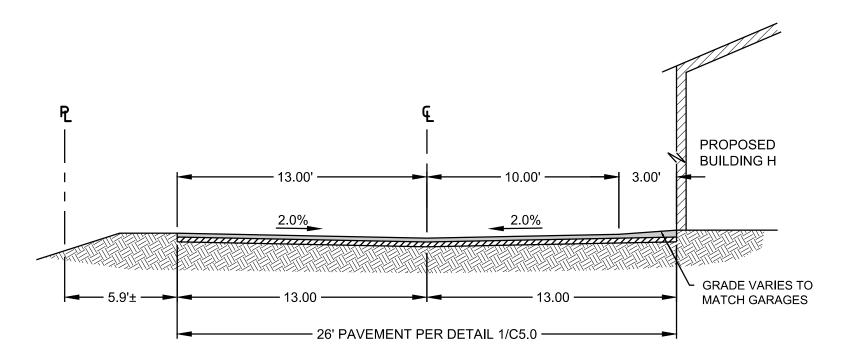
C5.1

# SECTION 2, TOWNSHIP 27 NORTH, RANGE 6 EAST, W.M.

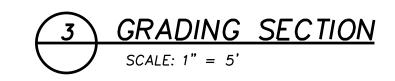


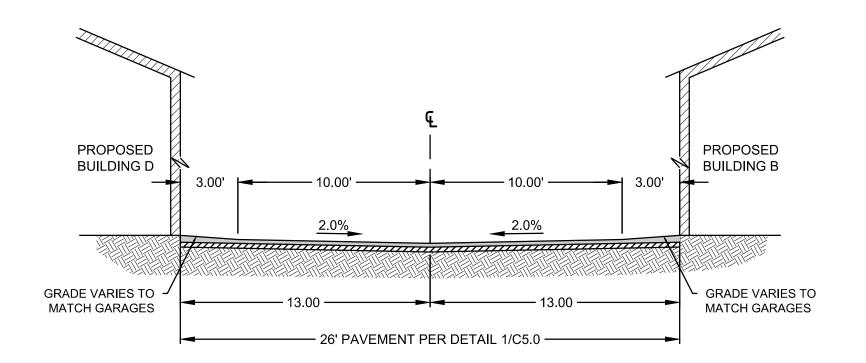
STA 10+00 TO STA 10+61 AND STA 11+00 TO STA 11+61



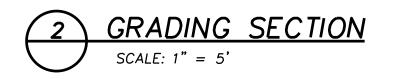


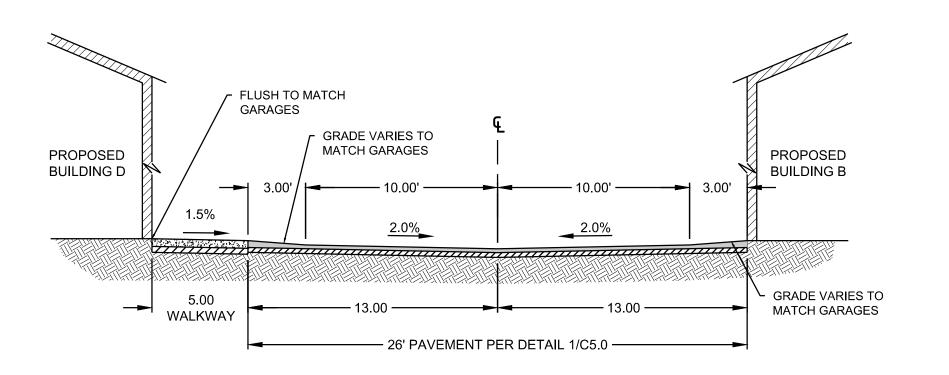
STA 6+10 TO STA 8+10



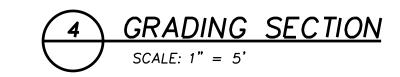


STA 0+30 TO STA 2+95

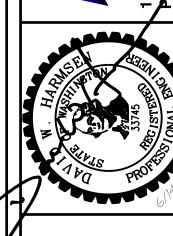




STA 2+95 TO 4+95



**REVISIONS** 



CHECKED BY:

